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ABSTRACT

To examine the contributions and procedures of regional educational laboratories, the Northwest Regional Educational Laboratory (NWREL) compiled a history of its own development and compared its approaches in several critical areas to those of seven other regional laboratories. A section on the purpose and development of the laboratories provides an annotated bibliography on regional educational laboratories from 1966 through 1976. Based on NWREL experiences and interviews with staff members in other laboratories, the critical ingredients of a regional educational laboratory were identified as: (1) clarify purpose; (2) define region; (3) choose an operational site; (4) create institutional framework; (5) choose directors; (6) select staff; (7) organize for work; (8) identify needs; and (9) specify research and development functions. Each of these elements is briefly defined, followed by examples from the NWREL model, reactions and comments from NWREL constituents, and perspectives from seven other regional laboratories. Along with these descriptions are four discussions on how to build the constituencies who use the services provided by the laboratories. Recommendations are made for planners of new regional research and development centers. The appendix includes tables displaying annual NWREL organization charts, membership patterns, and its board member profile, from 1966 to 1976. (JD)

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Northwest Regional Educational Laboratory
710 S.W. Second Avenue • Portland, Oregon 97204

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THE REGIONAL LABORATORY CONNECTION

Improving Educational Practices
Through Systematic Research and Development

By
Larry McClure

Northwest Regional Educational Laboratory
710 S.W. Second
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June 1, 1977

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INTRODUCTION

Purpose and Procedures

With commitment to regional laboratories reaffirmed by Congressional action and National Council on Educational Research (NCER) policy in 1976, the National Institute of Education's internal task force on labs and centers defined a strategy for reexamining the unique contributions of regional education laboratories--those R&D performers that share one unique tie: well-established roots in a geographic sector of the nation. An immediate yet persistent concern was the need to provide nationwide coverage as originally envisioned in the 1960s.

Several policy studies were proposed for planning purposes, with emphasis on what regionality means in operational terms. As part of this effort, Northwest Regional Educational Laboratory agreed to look back on its own history and compare its approach to styles of other laboratories. The Institute's interest was how well the most common elements might be "transported" or adapted to new settings should regions now uncovered seek to establish similar comprehensive R&D capabilities.

To accomplish these tasks, Larry McClure--a senior associate in NWREL's Education and Work Program--was selected to coordinate the study. McClure has been an R&D specialist at NWREL since July, 1971. Before joining the laboratory, he was a teacher, state education agency specialist and university school service bureau staff member.

On December 17, 1976, a staff/board task force was convened at NWREL as the first step in the identification of "critical ingredients" in NWREL's approach to R&D. Using the categories resulting from that day-long sifting process, interview materials were prepared for the next phase: a verification with practitioners in the Northwest region to determine if in fact these are the critical elements that have contributed to NWREL's ability to sustain a viable set of R&D activities.

Almost 50 persons from the Northwest region representing nine viewpoints (for example, clients, collaborators, critics) were interviewed during a three-week period in January, 1977, using structured as well as open-ended discussion guides.

To determine if other laboratories share these views of critical ingredients, on-site interviews were held with the directors and chairpersons of four other regional laboratories. This phase of the study placed much more emphasis on why each region requires a different approach in building an R&D capability. Laboratories selected for on-site interviews were Appalachia Educational Laboratory in Charleston, West Virginia; Far West Laboratory for Educational Research and Development in San Francisco; Research for Better Schools in Philadelphia; and Southwest Educational Development Laboratory in Austin, Texas.

As the first drafts of the analysis were being developed in early April, a final check was made to see if the same critical issues held up for the remaining three laboratories by conducting hour-long telephone interviews with directors of CEMREL, Inc., St. Louis, Missouri; SWRL Educational Research and Development in Los Alamitos, California; and Mid-continent Regional Educational Laboratory in Kansas City, Missouri.

Highlights of the study were then shared with directors of the eight laboratories prior to a May 4-6 workshop sponsored by NIE. During a three-hour segment at that session, directors and NIE staff representatives discussed how they would help a new laboratory approach three selected problems: (1) clarifying its mission (what capabilities or functions should a regional laboratory offer); (2) defining a region (what are the dimensions of regionality besides geography); and (3) organizing for work (how a comprehensive R&D institution should balance activities and priorities.

Results of these discussions and directors' comments on a preliminary draft of the final report were subsequently incorporated into the completed document.

Acknowledgments

NWREL gratefully acknowledges the time and interest extended by persons contacted during this retrospective look at what a regional educational laboratory is and the resources these grassroots institutions offer to America's educational system.

WHY REGIONAL LABORATORIES?

I share with you the great hopes for these laboratories. They should be large and significant enterprises. They ought to be conceived as comparable in their way to the large-scale laboratories of the Defense and Atomic Energy establishments. Nothing less will do. Their missions are equally important.

Lyndon B. Johnson
July 5, 1966

Historical Perspective

This story begins in 1966 when, based on authority contained in the Cooperative Research Act as amended by Title IV of the Elementary and Secondary Education Act of 1965 (P.L. 89-10), the U.S. Office of Education authorized 20 regional educational laboratories to be

- independent, nonprofit institutions
- geographically distributed with programs based on locally determined needs of a region
- multi-disciplinary, with functions to include research, development, dissemination, training, and technical assistance to schools.

Prior to this time, R&D was likened to the high visibility curriculum building efforts that gained notoriety during the post-Sputnik era. Yet, others saw the need for an educational R&D system comparable in size and influence to various R&D centers in agriculture, aerospace, medicine and defense. Educators had few places to turn for help with some of their most complex and comprehensive problems.

Grassroots concerns were these:

- Where can we obtain advice on planned change in education?
- Where can we find useful knowledge in validated, readily-available forms?
- Where can we find help, starting with need identification continuing through need resolution?
- Where is there a management capacity to pull together teams of specialists to accomplish that work?
- Where can we find a neutral place where the resources of all education-related agencies, organizations and individuals can be utilized?

To understand how a network of 20 regionally-based educational laboratories in 1966 has now become a loosely-knit coalition of eight organizations covering only 26 states in 1977 requires a careful review of key documents, interviews with key actors and an historian's interest in documenting the political interactions which made milestones like these important:

April, 1965	ESEA enacted, with Title IV authorizing regional laboratories
February to September, 1966	Planning grants awarded to consortia across the nation followed by operational and developmental contracts to 20 laboratories
November, 1966	Critical reviews of laboratory efforts result in first external analysis (Francis Chase)
1967-68	Federal policy shifts emphasis to product development designed to speed delivery of helpful tools to practitioners; dollar squeeze begins to force laboratories to look outside USOE for funding
1968	USOE discontinues five laboratories
1969	Council for Educational Development and Research (CEDaR) becomes private, nonprofit, informational arm for labs and centers
1970	USOE discontinues four laboratories
1971	Federal policy speaks of "institutional maturity" whereby laboratories will become less reliant on sheltered support; competitive procurement (program purchase) procedures are used to contract for specified programs on a two- to three-year basis
1972	USOE transfers laboratory efforts to newly-created NIE where R&D activities are scattered among various program units; laboratories turn to management fees and overhead funds to support certain basic institutional functions; three more laboratories disappear from the network leaving eight.
1975	Second major external review of federal R&D is conducted, including an analysis of laboratory potential (Roald Campbell, et al)
1976-77	Congress declares intent to cover nation with regional R&D system; NIE adopts special institutional relationship policy requiring laboratories to submit 3-5 year plans that include regional service configurations. By this point in time, some labs rely on NIE for less than half their annual revenue.

The pulls and tugs that laboratories have faced, then, have been several:

- In the beginning, each institution had a fair share of autonomy regarding R&D objectives, strategies, organization and staffing with federal coordination in a central spot.

- The promise of ample funding for educational R&D never materialized, prompting some laboratories to pursue other funds to support their missions.

- The shift from institutional support to "program purchase" meant laboratories needed to give less attention to regional constituency building while scrambling for available dollars just to survive.

- Meanwhile, federal policy shifts and agency personnel changes have been frequent, leaving key staff and board members in each laboratory to provide planning continuity.

According to some observers, during the 1972-76 period, while operating without long-term security and institutional support, the labs generally reduced their regional orientation, including development of programs based on regional needs, regional governance, and service. As a result of responding to diverse projects, they also gave up the sustained, problem-focused, integrated nature of their work.

Functions of a Regional Laboratory

How is a regional laboratory different from other R&D performers? Most observers agree a laboratory offers a range of functions to clients--skills that many established organizations and agencies could provide, but seldom all at once:

1. Sensing Needs

   The ability to identify emerging target areas amenable to educational R&D that may not only be isolated concerns unique to one locale but commonly held by communities across a region or the nation at large.

2. Defining Problems

   The ability to break educational problems into manageable parts and identify options and alternative approaches so that resources can be applied in the wisest possible way without overpromising on final results.

3. Identifying Resources

   The ability to serve as a broker or catalyst, either referring the client to someone else or trying to orchestrate a solution by bringing others together under lab auspices.

4. Retrieving Information

   The ability to access information from a variety of sources quickly, digest it carefully and apply it usefully.

5. Managing Effectively

   The ability, stability and flexibility to adjust staffing and respond quickly as new projects and programs begin and others end.

6. Producing Knowledge

   The ability to contribute to the theory and research base from which new technologies are born.

7. Translating Theory

The ability to devise practical procedures and materials which reflect both a solid understanding of theory and a practical understanding of field needs and applications.

8. Trying and Adapting Products

The ability and willingness to revise procedures and materials by monitoring their development and quality in controlled settings.

9. Suggesting Solutions

The ability to promote the process of change and renewal in education by marketing products of the R&D system vigorously.

10. Training Practitioners

The ability to help users learn how to apply and adapt R&D products to fit local needs or learn new skills to improve educational practices.

11. Training Trainers

The ability to "turnkey" selected products to teacher training institutions or other agencies better equipped to sustain, spread and reinforce certain process-oriented innovations.

12. Joining Forces

The ability to work with and through a regional and national network of R&D institutions in discovering, creating, testing and disseminating ideas and products cooperatively and feeding new ideas for R&D into future planning.

13. Providing Problem-Solving Services

The ability to apply and adapt systematic R&D technology and processes in assisting state and local educators in solving priority problems.

14. Setting an Example

The ability to demonstrate and teach others how most R&D skills can be used by practitioners themselves.

Annotated Chronological Bibliography on Regional Laboratories

The citations that follow might be included on a "starter list" of readings about regional laboratories. With the exception of the 1977 NIE solicitation document, all should be readily available through professional libraries. Dozens of mimeographed and nonpublished documents were examined in this study but were not listed if they are generally inaccessible. Many of the sources selected for this listing have good bibliographies of their own.

1966

Miller, Richard I. "Regional Educational Laboratories," Phi Delta Kappan, December, 1966, pp. 144-149.

Miller describes the early origins of regional educational laboratories including how USOE, its consultants and advisory panels worked swiftly in 1965 and early 1966 to build the laboratory network. He reviews interim and final reports that resulted from the preoperational planning stage in early 1966. Miller notes the variety of programs first proposed, governance structure, influence of boards and their representation (superintendents and college deans held the greatest percentage of seats), future planning, research functions, central USOE coordination and networking. Many of the issues Miller identifies still lie at the heart of laboratory planning ten years later--particularly the national versus regional debate.

1968

Eidell, Terry L. and Joanne M. Kitchel, eds. Knowledge Production and Utilization in Educational Administration. Published jointly by University Council for Educational Administration, Columbus, Ohio and Center for the Advanced Study of Educational Administration, University of Oregon, 1968.

This anthology includes seven papers presented to a UCEA career development seminar titled "Knowledge Production and Utilization, Role Emergence and Reorganization"--or more precisely--how to move knowledge to practice. It includes the thinking of several individuals whose names have appeared and reappeared in the laboratory genealogy even though the book's emphasis is on educational administration. Launor Carter talks about the need for "educational engineers" who help solve school problems. As a top executive of a firm that contributes to educational R&D itself (System Development Corporation), Carter says this about regional laboratories and centers:

"It is my belief that a successful program in the area of education will result only from very extensive and lengthy work on the part of (labs and centers) in intimate involvement with actual school experience in real life school situations." Norman J. Boyan, then director of USOE's Division of Educational Laboratories, next discusses how R&D can occur with multidisciplinary staff as the key and any number of delivery systems as vehicles. Egon Guba repeats the need for "linkages between users and producers" and recalls how Western Electric assumed that function between Bell Laboratories and the regional Bell system. He likens regional laboratories to the same linkage role that Western Electric plays. Guba and Clark have written more recently of R&D but in this essay Guba provides some useful definitions of the differences between research, development, diffusion and adoption processes--with emphasis on evaluation and the alternative approaches required in field settings. Ronald G. Havelock focuses on dissemination and translation roles and also talks a great deal about the "linker" role still in vogue during the late 1970s. Havelock does a nice job of tracing the literature on knowledge linking roles in many different fields including the infamous "agricultural extension agent" model. A comprehensive bibliography is included with his essay. Sam Sieber examines organizational influences on innovative roles, particularly the difficulties that school systems seem to face when adopting new ideas. Richard Schmuck's article on social psychological factors in knowledge utilization probes some of the norms and expectations that are held by school practitioners and researchers and the interpersonal realities that need to be recognized when connecting knowledge and practice. He suggests ten ways to improve these relationships. Keith Goldhammer concludes the series by citing implications for changes in administrative training programs.

Chase, Francis S. The National Program of Educational Laboratories, U.S. Office of Education, Bureau of Research, December, 1968.

Francis Chase had a unique opportunity to examine all laboratories during the period between late November, 1966, and August, 1968, as well as having access to USOE staff and other professional observers. The Chase Report had a profound impact on regional educational laboratories and their programmatic thrusts. His positive and enthusiastic support for the laboratory concept was helpful and his criticism and suggestions for improvement were carefully regarded both at the federal and regional levels.

Chase's observations and recommendations are not only contained in a single report but emerged during and after its preparation as well. For example, at a January 15, 1967 address to laboratory directors in New Orleans, he presented a paper titled "The Educational Laboratories: How do they

Fit into the Future of American Education?," in which tentative concerns and operational problems were raised. Another undated paper titled "The Distinctive Roles of Educational Laboratories" received wide attention as did a March, 1969 memo titled "Problems of Autonomy and Accountability in Government Contracts for Research and Development in Education."

1969

Svenson, Elwin V. Observations on Emerging Relationships Between Regional Educational Laboratories and State Departments of Education, St. Ann, Missouri: CEMREL, Inc., October, 1969.

A study of how selected laboratories are relating to the state education agencies in their region, this report reveals that interactions and involvement range all the way from excellent to poor. Recommendations for strengthening the ties are made. Perhaps the best section of this easy-to-read, 45-page report is Appendix A which reviews some of the historical highlights of how laboratories tried to build constituencies. Svenson had access to USOE files to supplement his field notes and is able to describe various patterns of regionality, of collaboration and of cooperation. A useful bibliography is included that lists several "fugitive" but important consultant reports, staff memos, and Congressional documents.

1970

Flight, David S. "Regional Laboratories and Educational Research and Development," Administrators' Notebook, Midwest Administration Center, University of Chicago, Vol. XIX, November, 1970, No. 3.

Flight was a member of the Chase team and later as the director of the Center for Leadership and Administration at the University of Massachusetts made these observations based on his dissertation written during the period of the Chase study and shortly after. He briefly discusses R&D models used by "successful" and "less successful" labs including their definitions of research and development.

Another series of observations deals with relationships with constituents, including the ability of laboratory directors to cope with federal demands and to hire persons with technical as well as interpersonal competence. Indeed, Flight's conclusions remain at the core of 1976-77 deliberations on how to resolve the conflicting demands between the laboratories' accountability to the federal government and their need for autonomy and flexibility as regional R&D organizations.

"Regional Educational Laboratories: Agents of Change." Journal of Research and Development in Education, Vol. 3, No. 2, Winter 1970.

Stephen Bailey's lead-off article in this journal provides a concise history of labs in terms of the various expectations that were placed on them by local, state and federal constituents. Regionality, he points out, has been a Congressional concern since the earliest hearings. He cites the influences of the mid-1965 guidelines, the struggles to define purpose and mission, the national versus regional debate, the catalytic role of labs, governance and size of boards, difficulties in establishing a network, and the impact of outside consultants and review panels. A USOE program officer, Frank Schmidtlein, next describes 33 lab programs that were operating in 1969. Richard E. Schutz, still director of SWRL, follows with a discussion of the nature of educational development including the key variables that make it successful, emphasizing the various R&D functions labs are ideally suited to provide. John Hemphill, director of Far West Laboratory, then details the R&D process as it affects the management and operation of laboratories and its mix of programs and projects, including the criteria used in selecting programs, accountability procedures, evaluation, budget control, review processes and the like. James Becker, then director for Research for Better Schools, next describes how labs differ from other R&D performers by moving products into practice using a systematic R&D process. Francis Chase then wraps up the special issue with exerpts from his three-year perspective on the distinctive characteristics of laboratories, including conditions that are critical to their future development and influences they are likely to exert on education at large. His concluding plea: liberal funding at least through 1980 to assure independence in decision making and operations. Chase, who chaired the first National Advisory Committee on Educational Laboratories from 1966 to 1968, provides a succinct summary of what regional educational laboratories are:

1. Quasi-government Organizations: Laboratories are nonprofit in nature and exist because they are able to assemble the talent that regular government agencies are unable to provide.

2. Choice of Missions: Laboratories are able to concentrate their efforts on a narrower range of objectives than is possible for schools, colleges or state departments of education.

3. Emphasis on Development: Laboratories accept the idea that they will emphasize development testing and implementation of products to improve the effectiveness of learning.

4. Dependence on Research: Laboratories that made the quickest starts drew upon the work of other researchers and theorists so that systematic development was possible. Laboratories were able to adapt and complete ideas that often were still buried in research findings.

5. Partners in Diffusion: Laboratories have maintained close ties with state departments of education, schools, colleges, universities, state education agencies, and professional associations whose support and involvement were essential.

6. Successive Approximations: Laboratories do not promise they will deliver magic solutions overnight but first try to test products in a variety of settings over an extended period of time using results of field trials for extensive revision.

7. Compatible Systems: Laboratories recognize they will not change educational practice by simply introducing a piece of material or new technology but must work with human behaviors and social systems to bring about successful change. Educational institutions will not simply adopt a new idea but want to adapt it to their own setting.

8. Concern for the Disadvantaged: Laboratories tended to focus on special populations with special needs during their formative years.

9. Concentration on Learning Systems: Several laboratories were deeply concerned about how learning could be facilitated and included related activities on their R&D agenda.

10. Teacher Education: Several laboratories aimed programs at improving skills of instructional staff.

11. Institutional Development: Several laboratories were also involved in programs designed to restructure educational institutions so that the entire system of education might be improved, not just pieces.

12. Dissemination: Several laboratories included heavy emphasis on dissemination with strategies which would help spread educational products throughout the educational enterprise.

13. Accountability to Users: Most laboratories were highly concerned about training personnel to carry out educational change. Laboratories believe that implementation assistance is part of their role.

1972

Crawford, Jack J. Facilitating Inquiry in the Classroom Developed by the Northwest Regional Educational Laboratory. Product Development Report No. 20, Palo Alto, California: American Institute for Research in the Behavioral Sciences, March, 1972.

This product development report is one of 21 such documents dealing with the developmental history of recent educational products. Two of the reports deal with products developed by regional laboratories: this one on a package of materials for teacher training developed by NWREL and a second one titled "First Year Communication Skills Program" developed by Southwest Regional Educational Laboratory. The series represents a relatively unique attempt to document what occurred in the development of various R&D products including the critical milestones and decisions that affected its creation and eventual dissemination. The purpose was to provide USOE with data and policy recommendations on ways to monitor R&D processes more effectively. Each of the reports represents a kind of case study similar to those later developed by the Stanford Research Institute and Rand in 1975.

Baldridge, J. Victor and Rudolph Johnson. The Impact of Educational R&D Centers and Laboratories: An Analysis of Effective Organizational Strategies. Stanford, California: The National Academy of Education; Chicago, Illinois: The Spencer Foundation, May 15, 1972.

This study was sponsored by The Spencer Foundation using a grant from the Proctor & Gamble Company. It retraces the history of 8 R&D centers and 11 laboratories then existing in the fall of 1971 with emphasis on how the R&D system works. Five management practices were identified and 16 of the above 19 institutions were visited on site. The five areas included: (1) program emphases and evaluation systems, (2) dissemination and implementation, (3) staffing, (4) field relations, and (5) relations with personnel training institutions. The authors of this study believe that R&D is indeed a nonlinear function and that R&D laboratories need to have the capacity to "do it all." They point out, however, that laboratories have traditionally had little money to carry out one important step--dissemination. The writers believe that laboratories need to have a more diverse mix of staff skills with particular emphasis on those who will be working in the field and relating to practitioners. The authors note that the laboratories are in an ideal position to perform a catalytic function and wish more interlab communication could occur. They note that laboratories tend to look at teacher training institutions as "stuffy" and "hopeless." They feel that the whole matter of field relationships is summed up in the following statement:

> If one takes the position that programmatic research is a step-by-step progression in a hand-it-on style, then close contact with field users is unnecessary in the early stages. If one believes, however, that research and development is nonlinear and dependent on feedback, then field relationships are central from the beginning.

However, the authors do not advocate a fire-fighting role for laboratories. This brief study includes a good bibliography.

Lins, L. Joseph. Organizational Structures and Operational Practices of Selected Educational R&D Centers and Educational Laboratories and of Selected Centers, Laboratories, and Institutes on One University Campus. Technical Report No. 237, Madison, Wisconsin: Wisconsin Research and Development Center for Cognitive Learning, September, 1972.

As part of a self-study of internal organizational structure and institutional ties, the Wisconsin R&D Center examined the organizational patterns and relationships, staffing, funding, communication patterns and selected other problems of a variety of R&D performers. The laboratories included in the study were CEMREL, Far West, and Research for Better Schools.

1973

Hemphill, John K. editor, and Fred Rosenau. Educational Development: A New Discipline for Self-Renewal. Berkeley: Far West Laboratory for Educational Research and Development and Eugene, Oregon: Center for the Advanced Study of Educational Administration, 1973.

Here is a comprehensive, 340-page look at how Far West Laboratory (FWL) has philosophically and operationally carried out its R&D mission. For persons wanting to hear from R&D specialists themselves what their jobs entail, this is a one-of-its-kind document. While the examples and approaches represent one laboratory style at a particular time in its ten-year history, the book depicts the kind of rigor and vigor that all laboratories apply in practicing the discipline of programmatic R&D. Part I describes the rationale that guides Far West Laboratory's approach to educational development. Other R&D performers who need to be involved in the process are briefly defined. Definitions are also provided for the types and balances of R&D typically used in education today. Part II illustrates planning activities that a laboratory must perform prior to initiation of developmental activities, including long- and short-range program work scopes and background or synthesis papers that review relevant literature. Part III concentrates on the evaluation and the revision functions and provides a useful model of how a laboratory approaches the field testing of its developmental products. Samples from actual FWL evaluation reports are reprinted as well as a good example of how "basic" or "pure" research is distinguished from "decision-oriented" evaluation in product development. Part IV delves into the complex issues of disseminating and installing the products of R&D. Comparisons are drawn to familiar marketing strategies and the kinds of approaches that various performers use in assessing the utilization of their products. Policies and guidelines are provided for copyrighting, packaging, and producing as well as mechanisms for attracting

potential publishers. The final essay points out a major difference between commercially available materials and those produced by laboratories: the users of the latter not only must be made aware of good products, but often have to be made aware of the need for the product in the first place. Funding is the focus of Part V and actual examples of program plans from Far West Laboratory and 1969 guidelines from a USOE Bureau were excerpted to illustrate the complexities of proposal writing and budgeting. Part VI considers problems relating to managing product development--particularly organizing staff for programs or projects. The importance of program focus is emphasized. Examples from various laboratories are cited to illustrate program planning and monitoring activities. Finally, a case study of a specific R&D product is offered in detail to depict many of the processes described earlier in the book.

Baldridge, J. Victor and Terry E. Deal, Rudolph Johnson, and Jeanette Wheeler. "Improving Relations between R&D Organizations and Schools." Research and Development Memorandum No. 115. Stanford, CA: School of Education, Stanford University, November, 1973.

This easy-to-read paper draws primarily from two other studies: the 1972 Baldridge and Johnson study of 19 labs and centers and an 18-month effort by Deal at the Stanford center studying ways to gain the cooperation of school districts on a three-year program to be conducted by the center. Deal and his staff interviewed 6 county superintendents, 34 district superintendents, 3 boards of education, and approximately 50 principals and 200 teachers and representatives of professional organizations, local colleges, and the California State Department of Education.

The authors note "serious problems" in relations between research institutions and school agencies, namely:

1. Growing resistence to outsiders coming into local education agencies

2. Practitioners' feelings that R&D is not really helping cope with problems on the firing line

3. LEAs rarely receive useful feedback when they do cooperate

4. Stereotypes and myths that practitioners hold about educational researchers

The authors attribute these problems to differences in traditional viewpoints and blunders made by researchers themselves. Indeed, the authors pinpoint problems not unlike those found in NWREL's 1977 field interviews. The memorandum describes ideas for facilitating field relationships--many of which laboratories in fact do practice regularly today.

1974

Clark, David L. and Egon G. Guba. The Configurational Perspective: A New View of Educational Knowledge Production and Utilization. Washington, D.C.: Council for Educational Development and Research, Inc., November, 1974.

At the invitation of CEDaR and other R&D-interested parties, Clark and Guba propose--or endorse--the collaborative view of R&D functions (from basic research through installation) and suggest other performers (e.g., centers, publishers, foundations, universities, state education agencies, local education agencies) should be encouraged to do likewise--preferably in cooperation with each other. Clark and Guba back off from their earlier promulgation of a systems view in which the federal government first allocates dollars for research and development, certain institutions do the basic research, while still others handle development activities, with LEAs eventually winding up as the consumers (e.g., the agricultural extension agent model). Instead, they see a configurational approach (partnership) with field-initiated R&D given greater emphasis. They support a networking of R&D performers to foster greater interchange, with laboratories funded on an institutional base.

1975

Campbell, Roald F. R&D Funding Policies of the National Institute of Education: Review and Recommendations, Washington, D.C., National Institute of Education, August, 1975 (Final report of Consultants to the National Institute of Education and the National Council on Educational Research).

This is the most recent major external study of laboratories and centers by a distinguished group of consultants. It also discusses other R&D performers that make up the national system and their relationships. To introduce the discussion on laboratories, Campbell provides a review of historical highlights and emphasizes the original mission of laboratories based on early documents. He notes that the same criticisms that were heard in the 1960s are around in the 1970s and places a great deal of the blame for the current state of affairs on the federal government itself. The Campbell team lists several concerns and recommendations affecting the regional laboratory network:

1. There are too many institutions trying to share limited R&D resources which means that implementation of R&D has been "unsatisfactory." The report advocates more dollars for a variety of approaches and institutional arrangements in addition to laboratories themselves.

2. Laboratories should have a mission that relates directly to the priorities of NIE.

3. Laboratories should be funded on a three to five year basis, with awards exceeding $3 to $4 million per year. They note this would free staff from scrambling for dollars and would allow laboratories to assemble sizable teams of people over time.

4. Laboratories should be "protected" from providing services directly to local education agencies and state education agencies. If service is provided, it should have "wide applicability to improve national R&D products."

5. Federal agencies should provide more careful monitoring and review of R&D activities.

6. Laboratories should be constrained from pursuing outside funding.

7. Laboratories should deemphasize "regional" work and strengthen work on the national R&D agenda. However, they believe it's OK to address local issues if they are national problems as well. Their concern is that laboratories cannot adequately respond to all local requests.

8. On the other hand, they believe laboratories can easily become "separate" from their constituents.

Campbell believes that labs cannot become job shops alone but must work out a balance. He would prefer that laboratories not focus their total attention on small contracts for survival. The report provides an analysis of NIE's own decision-making relationships with laboratories. It decries the so-called program purchase approach to funding. Of real concern to the consultants is the turnover in project officers at the federal level and the fact that program decisions are often made without information on the "whole" laboratory organization. The report recommends three to five year planning and encourages a restructuring of NIE staff. The lexicon that emerged as a result of the Campbell report includes words like "special relationships" and "national laboratories." One of the useful functions of the report is a reminder of the political climate in which NIE and various R&D performers must operate.

Markley, O.W. The Normative Structure of Knowledge Production and Utilization in Education: Vol. II, Case Studies of the Infrastructure of Educational R&D, Menlo Park, California: Stanford Research Institute, Research Report No. EPRC 355-13, December, 1975.

As NIE began to reexamine policies affecting the nation's R&D system in education, several investigators were funded to provide information to decision makers:

- One is this 18-month study by SRI of how R&D is governed (these writers prefer the term "knowledge production and utilization" rather than R&D which they construe as being too narrow)

- Another is Databook (1976) which reports the status of educational R&D in the U.S. by William Paisley, et al at Stanford

- A third is a survey of institutional performers by Rolf Lemming at NIE

- A fourth is comparisons of educational R&D systems with agriculture, aerospace, and defense by Michael Radnor (Radnor was also under contract in 1976-77 for a study of regional dissemination linkages)

- And lastly, a look at KPU activities in departments, schools and colleges of education by Clark and Guba

All this information was designed to help NIE formulate an effective R&D monitoring system. SRI's Volume 2 illustrates a "mapping" technique designed to trace how R&D performers approach their work. Case Study IV in Vol. II focuses on how federal policies and policy shifts have affected Far West Laboratory (chosen by the researchers as the one lab that has successfully weathered "political and economic buffeting and because it was accessible to us"). The case study also looks at the interactive nature of federal- and laboratory-initiated policies. It pinpoints many of the strains and stresses that have apparently affected laboratories generally. Four aspects of laboratory decision making are analyzed: fiscal policies, personnel policies, procedures, and planning, development and dissemination activities. This case study provides a useful overview of how laboratory management must deal with external forces while trying to maintain orderly growth of the institution. Case Study V zeroes in on FWL's minicourses as an example of how decisions by Far West Laboratory and federal agencies affect the development of one R&D product.

1976

Dershimer, Richard A. The Federal Government and Educational R&D, Lexington, Massachusetts: Lexington Books (a division of D.C. Heath & Co.), 1976.

Dershimer, executive officer of the American Educational Research Association, documents the support for educational R&D as it evolved across the federal government during the 1954-72 period. Two sections are of particular interest to this study: Chapter IV, "Research and the Breakthrough in Federal Aid for Schools," lays out some of the initial groundwork for educational R&D that was carried on at USOE in the early 1960s, including the Gardner Task Force Report dated November 14, 1964, which called for greater emphasis on development and dissemination which new organizations called "laboratories" might be able to provide; Chapter VI, "Some Bureaucrats and How They Fared," provides an historical analysis and "inside" view of USOE decision-making in the period between 1965 and 1968 when laboratories were first conceptualized and established. Dershimer's book provides a comprehensive picture of the political structure that influences educational R&D and references many of the key persons who provided leadership, including some still involved in the laboratory movement today. An extensive bibliography is included.

National Institute of Education, Institutional Profiles of Education Laboratories and R&D Centers, prepared by the Task Force on Labs and Centers, NIE, September, 1976.

This publication includes institutional capability profiles of the 17 educational labs and R&D centers as submitted by the organizations themselves. Information includes mission, programs, resources, staff, facilities, governance structure, organization, and approaches to staff development. An average of 20 to 25 pages is devoted to each institution with enough detail to understand how the federally initiated R&D network looks some ten years after its launching. A similar publication developed by the Council for Education Development and Research (CEDaR) titled Resources for R&D: Institutional Capability Statements of Eighteen Contractors was also developed during the same time period; however, each of the institutional statements is much shorter and includes slightly different information.

1977

National Institute of Education. "Official Solicitation of Long-Range Plans from Labs and Centers," March 25, 1977.

Pursuant to federal legislation, NIE was required to solicit three to five year long-range plans from labs and centers in early 1977. This document underwent several drafts and was officially issued even as some of the preliminary steps--e.g., submission of "mission statements" had already occurred. The request defines various relationships and expectations and prescribes how the plans should be prepared, including timelines for review. The real value of this document is its attached documents of historical interest:

1. 1976 authorization legislation for the National Institute of Education and the National Council for Educational Research Resolution No. 18

2. R&D centers: specific requirements

3. Regional educational laboratories: specific requirements

4. List of eligible laboratories and centers

5. Letter from November, 1976, Austin meeting from the director to labs and centers

6. Charter, panel for the review of laboratory and center operations

7. September 3, 1976 agreements memo between NIE and CEDaR members

8. March 30, 1976 agreements memo

9. February 3, 1977 agreements letter

10. National Council on Educational Research Resolution on Instructional Program Improvement

ESSENTIAL INGREDIENTS OF A REGIONAL EDUCATIONAL LABORATORY

The elements that follow could almost become checklists in a how-to-do-it manual for planners of new regional educational laboratories. "Rather than reinventing the wheel," says this section, "let's build on the successful models already available." Each ingredient is briefly defined, followed by examples from the Northwest Regional Educational Laboratory model, reactions from Northwest constituents and perspectives from the seven other laboratories on the same general issues.

The critical ingredients are:

Clarify Purposes

Build Constituency-I

Define Region

Choose an Operational Site

Build Constituency-II

Create Institutional Framework

Choose Director

Select Staff

Organize for Work

Build Constituency-III

Identify Needs

Specify R&D Functions

Build Constituency-IV

Clarify Purposes

Do we need this kind of institution anyway?

Creating new institutions called regional educational laboratories in 1965-1966 invited the inevitable question: Why? Planners of new regional R&D institutions in 1977 must be prepared to answer questions like: Whose needs will be served? How will existing institutions fit in the scheme? Is the mission clear enough to guide both policy and performance but broad enough to respond to emerging needs? Is it not only documented for all to see but does it consistently guide board and staff actions?

There is nobody else doing what the lab is doing. It has filled the void.

--Chief state school officer

A regional laboratory must develop solutions to educational problems using concepts from the whole range of social sciences.

--Director of small university R&D organization

No other source is as helpful.

--Dean, school of education

We saw an institution that was able to bring research expertise closer to users, to move from the theory base to practical problems, to implementation of solutions. When lab staff come, district personnel can see things happening. There was a time when university or colleges were beefed up for this kind of service, but no longer.

--Retired chief state school officer

ONE LABORATORY'S APPROACH

Establishing Identity

Documents from NWREL's early planning days used phrases like these in defining the laboratory's purposes:

- Acquire and apply basic knowledge from diverse fields that may bear on educational practice.
- Serve as a catalyst in resolving needs shared in common by constituents in the region.
- Speed and extend utilization of new knowledge that will improve classroom instruction.
- Assist local and state education agencies, colleges, universities, professional organizations, cultural agencies and private enterprise in their education-related work.
- Help acquaint the above target groups with useful innovations and assist with installation as feasible.
- Provide interdisciplinary solutions to instruction-related problems.
- Evaluate educational practices and techniques to help bring about improvements.

Still, even this listing of general purposes was several months abuilding and few people were standing still and waiting for such guidance. The fact that no one really knew what a regional laboratory would be in 1965-66 had both its positive and negative aspects:

1965-66

POSITIVE	NEGATIVE
1. Widespread regional involvement; desire to affiliate	1. How to handle a deluge of proposals from individuals and agencies touting their pet ideas
2. Feeling of excitement and anticipation	2. Lack of clarity on what products would be developed and when they would be ready
3. Willingness to work without reimbursement	

POSITIVE	NEGATIVE
4. Spirit of cooperation	3. Emphasis on teaching aids and technology rather than instructional processes
5. Strong coordination and leadership from USOE	4. Confusion over the role of the laboratory in training teachers, operating demonstration schools, maintaining state offices and the like
6. Substantial basic institutional funding with maximum regional leeway in defining work areas	

For a few hectic months during that period, literally hundreds of people were involved and thousands of words were drafted about Northwest Regional Educational Laboratory. While folks involved in regional laboratories gradually became more sure of themselves and what they could do, however, there was increasing confusion at the federal level (see bibliography) as national leaders tried to understand the network they had established. Signals from Washington, D.C. shifted as agency staff changed, as blue ribbon panels and consultants studied the notion of labs and centers, and as pressures for "national" laboratories began to alter the early Gardner Task Force vision of regionally-based R&D programs

Ten Years Later

In its annual review of the laboratory's mission statement, however, NWREL's 1975 board reconfirmed its commitment to assist education, government, community agencies, business and labor in bringing about improvement in educational programs and processes by:

- Developing and disseminating effective educational products and procedures
- Conducting research on educational problems
- Providing technical assistance in educational problem solving
- Evaluating effectiveness of educational programs and projects
- Providing training in educational planning, management and instruction
- Serving as an information resource on effective educational programs and processes

A comparison of the two statements shows a consistency of purpose over a ten-year period--a consistency that helps the laboratory and its region stay on an even keel even when times are rough.

Ten years later finds basic purposes at NWREL more sharply defined, but a different set of problems:

1975-76

POSITIVE	NEGATIVE
1. Clear statement of mission and realistic expectations from field	1. Federal priorities shape programs and projects with little leeway for regional initiation
2. Constituencies identified	2. Growing apathy in field as regional needs and ideas are not required in proposals submitted
3. Competent staff assembled	3. Problem-solving capacity limited by what local and state education agencies can pay for directly
4. Excitement cooled, yet steady confidence and pride in the institution	4. Little attention being given to membership cultivation as survival hinges on contracts determined elsewhere
5. R&D recognized as a valuable tool in problem solving	5. No central institutional coordination in Washington as laboratory works with separate agency project officers and programs
6. Variety of long-term programs and projects	
7. Products visible and used	

Assumptions for the 1970s and 1980s

Despite early confusion and growing pains since 1965-66, several basic assumptions were closely held and still underlie Northwest Regional Educational Laboratory as it anticipates a second decade of service:*

1. "The work of an effective regional institution must be driven by continuous sensing of needs and definitions of problems. Practitioners must be full partners in this enterprise.

2. "Optimum R&D strategies will vary, given the nature of the problem defined. An effective regional institution must be well equipped to perform research, development, dissemination and implementation assistance. It is the orchestration and combination of all of these four R&D functions which contribute to the practitioner's solution of problems.

* Mission Statement: 3-5 Year Plan, February 21, 1977.

3. "If the institution is equipped to perform research and development, but not dissemination and implementation assistance, its contributions to problem solutions are incomplete and its work will not be as highly valued by practitioners.

4. "An effective regional institution must have a base of long-term research and development programs to provide a pool of techniques, products and expertise to draw on in helping practitioners assess needs, define problems, explore alternative solutions and plan and implement solutions. An effective service effort possesses such a pool and offers assistance in each of these areas.

5. "The service effort provides valuable information about implementation needs and problems to the long-term research and development programs. More often, the long-term R&D provides the knowledge base and core staff essential for effective services.

6. "Regional R&D activities result in outputs for meeting national needs and, conversely, national activities provide outputs which can be adapted and used in specific local settings. A national network of institutions is needed to provide for this exchange."

Perhaps the clearest summary of NWREL's purposes since its creation in 1965-66 is captured in remarks made by the executive director as staff gathered for the annual planning retreat in late fall, 1976:

> "No one person or even small group of persons can claim credit for the effectiveness of our lab. What has been accomplished? Together we have built a successful and effective independent and nonprofit educational and research and development institution whose primary objective is educational renewal, reform, change and improvement.
>
> "The processes or tools we used to reach that objective are needs sensing, problem identification, planning, programmatic research and development, evaluation, dissemination, training, and technical assistance. We We work <u>with</u> others in using these tools and we give credit to others for results. We are facilitators of improvement and change--it is our role and we accept it gladly for it makes our work meaningful and rewarding. R&D is not an end in itself--the end objective is better educational programs for boys and girls and adults.
>
> "So the state of the union in our laboratory is this: it is healthy; its future is bright; its problems and challenges are many; but the human resources for meeting those challenges are more than adequate: we have

this staff group here, we have the rest of our very capable staff back home, we have an outstanding board of directors behind us, we have unparalleled support and confidence from individuals and institutions in our region and across the nation."

Putting Purposes into Action

Soon after they come on board, all NWREL staff discover there are two overarching commitments they must never forget as they carry out their work either at 710 S.W. Second in Portland or in a remote Alaska school district:

1. Help school people (and lay persons, too) see how the results of educational research and development can help alleviate problems. Demonstrate that it is possible to move valuable theories and research off dusty bookshelves by taking at least two additional steps:

   - Apply your creative skill as talented R&D personnel who have been in classrooms and administrative offices yourselves and who have a vision of what the future holds for education in America.

   - Seek out "here and now" input from students, teachers, administrators, scholars and other practitioners who know what works today and what should hold true for tomorrow.

2. Help improve educational practice, but without subverting the legal and professional commitments of existing institutions. Let established agencies take credit for the good things that happen from the laboratory's products and services. If support does not come from an important group, then non-resistance may be just as helpful. If there appears to be "no hope" that established educational institutions want to change, let them be. Don't force ideas--just encourage.

HOW REGIONAL STAKEHOLDERS FEEL ABOUT "CLARIFYING PURPOSES"

There are many variations on the above themes which emerged during the regional survey. These sift into ten recommendations new laboratories might consider:

1. Don't promise more than you can deliver. Start by building a solid base. Beware of spreading yourself too thin. A laboratory should not be cast in a fire-fighting role.

2. You are not going to revolutionize the educational world. Recognize there will be inertia, but you can help prescribe orderly change based on step-by-step planning.

3. Remember the balance you offer. You don't have to be narrowly focused; you can help build bridges to the field quickly. Even though they should, busy educators don't have time to read the research; they need to see how the results can be applied.

4. A laboratory must be ready to describe a variety of alternative solutions to our problems, not just one easy solution.

5. A laboratory should avoid competition with existing legal entities, but emphasize its ability to orchestrate resources rather than acting unilaterally.

6. Be willing to risk and take advantage of opportunities to work in areas that others avoid (e.g., problems of rural schools, bilingual education).

7. Yet, avoid leaping into new areas of work just because money is there. Scrambling for money can confuse your original purposes and regional needs will get lost in the shuffle.

8. If the available research base is inadequate, a regional laboratory may occasionally need to create or add to the theory base itself.

9. The original distinctions between R&D centers and laboratories are hazy now: each can be involved in dissemination, refinement and reinterpretation of the basic research. This adds strength to the overall R&D system rather than assigning one set of functions to some performers and not to others.

10. Avoid looking only to the educational community itself for answers to educational problems.

HOW OTHER LABORATORIES REGARD "CLARIFYING PURPOSES"

The respondents from other labs generally agree that institutional purposes must be determined before moving on to organizational tasks. They note that practitioners are only beginning to appreciate how R&D results can

help them make better decisions and that lab staff should approach their mission not as an effort to "convert the natives" but to work through problems with constituents systematically so they will see how R&D can be utilized. At least one director feels that an important purpose is to help strengthen the R&D awareness and capability of existing institutions. Letting other agencies get the credit for the laboratories' work is a common thread, too.

On Promising Too Much

Laboratory decision makers strongly believe that because resources will only go so far, constituents must understand exactly what the laboratory can and cannot do. These respondents recommend that a new lab identify a range of specialties--in other words, do a good job within a definite set of program priorities. They worry about laboratories becoming "job shops"--the same kind of fire-fighting services that some state and intermediate agencies are already forced into providing.

However, while one laboratory board chairperson yearned for the stability of purpose that comes from a handful of basic program commitments, "When you're trying to keep your head above water, you can't be too restrictive about what kinds of work you will do." Still, even if times are hard, "You have to admit you can't solve everything and maybe you can help the client by pulling together expertise from somewhere else."

On Supporting Existing Agencies

Other labs have mixed feelings about supporting constituent agencies in the region just because they're established. They tended to agree that many educational institutions today sometimes need to be "pushed out of their ruts" and that laboratories are in a good position to do that. "Renewal yes, revolution sometimes" was one board chairperson's plea while another added "You should support those agencies you can, but don't make causes out of those you cannot."

On Balancing Theory and Practice

One director warned that laboratories should not always follow pure models of R&D that say you must build innovative practices from a solid basic research base, pointing out that many worthwhile products developed for education would never have left ground zero if all the theories had been verified first. "You have to balance basic research, applied research and professional intuition. You push some good ideas and let the theories catch up to help refine the product."

Another lab director added a familiar warning about R&D as a process: "Despite pressure from the field, you must sometimes hold firm on not releasing products before they are ready. A laboratory must remind itself of certain basic professional commitments--including adequate time for development, testing and revision--to help maintain field confidence in its work."

Build Constituency-I

If we weren't here, who would care?

Crossing state boundaries to identify and solve regional needs and problems holds great promise as a way to foster dialogue and share resources. Yet, there are dangers to be reckoned with as well: political territories often make little sense, but they represent powerful forces as public and private interest groups maintain their traditional roles and functions. Their first allegiance is to themselves and their own constituencies--not necessarily a "third-party" regional organization.

A regional laboratory has the unique opportunity to pull together various institutions of higher education, state departments and local education agencies to accomplish common tasks. It provides the catalyst no one else can.

--Associate dean, college of education

Our region really has no political base of its own to draw on. Thus, a regional lab must give top priority to close working relationships with state agencies and institutions--particularly state departments of education. Build your constituency from there first.

--Member of original laboratory planning committee

The politics and policies of existing agencies (like universities and private publishers) would not enable them to build a consortium like a lab can do.

--Professor of education

ONE LABORATORY'S APPROACH

The original USOE guidelines in 1965 suggested a host of groups should be involved in a laboratory's work. Sure enough, early NWREL planners quickly discovered a wellspring of interest in the potential of a regional organization. Initially that commitment was to come from two important groups--state education agencies and teacher education institutions--who had travel funds and enough flexibility to become intimately involved in the planning sessions that were to consume the better part of an eight-month period before a small pre-operational planning grant was awarded in February, 1966. It wasn't long, though, before many other agencies and organizations were contributing personnel time and logistical support to the cause.

The persons who served on the initial pro tem planning committee and interim board for NWREL and who eventually handed over a well-designed package to the official board of directors a year later were a hard-working group.

NWREL PRO TEM PLANNING COMMITTEE
(Interim Board)

	State					
Affiliation	Alaska	Idaho	Montana	Oregon	Washington	Total
Teacher	1	1	1	1	1	5
Administrator	1				1	2
State education official	1	1	1	1		4
Teacher association representative					1	1
Teacher educator	1	2	2	2	1	8
TOTAL	4	4	4	4	4	20

The pro tem committee for the Pacific Northwest region made a conscious decision at the outset: for planning purposes, only whole states would be invited to participate even though all or part of a state might also work with an adjacent regional laboratory. Yet, NWREL's formative months were marked by other distinguishing features as well:

1. Well-known educators--people whose names were recognized in their states and among their professional colleagues--were involved in the early decision to "go" with planning for a prospectus.

2. The pro tem committee, composed of four representatives from each state, met regularly to coordinate preparation of the prospectus.

3. A smaller executive committee charged with writing sections of the prospectus and reporting back to the full committee kept in close touch during the in-between times.

4. Subcommittees of the pro tem committee were formed to accomplish specific tasks:

   a. Specify initial program areas

   b. Communication across region and within states

   c. Draft bylaws

   d. Draft selection criteria for director

   e. Select headquarters site

5. Institutions interested in membership in the new regional laboratory for the Northwest states were invited to send $10 to help share the cost of putting together the initial prospectus.

6. Each state's members of the steering committee were charged with generating and sustaining interest back home. Some held meetings and distributed occasional memos to keep local constituents apprised of progress.

7. Contacts with federal officials were multifaceted and continuous. If USOE staff said they would be available to provide advice, they were invited to come as often as possible and meet with the pro tem committee and other regional constituents. Progress reports--both formal and informal--were shared regularly with federal agency personnel. Communication links with state congressional delegations, particularly those individuals holding leadership positions in the House and Senate, were maintained.

8. Meetings of the pro tem committee itself were held in key locations of the region so that local and state constituents could see that this interstate dialogue was indeed real and not a fairy tale created by their state representatives.

PLANNING MILESTONES OF
NORTHWEST REGIONAL EDUCATIONAL LABORATORY

Meetings	Where	
May 7, 1965*	Portland	Eight individuals from Oregon and Washington representing various areas of education meet to explore common interests.
June 7-8	Portland	Working committee--expanded to include Montana, Idaho and Alaska--develops a preliminary draft of the proposal from materials and information at hand.
June 11	Seattle	Group from five states meets to review and interpret Title IV, the conceptualization of regional laboratory functions, resources for a potential laboratory and the planning of next steps.
June 30	Seattle	Over 130 persons from all states in the region and representing all levels of education meet to discuss the intent and purpose of Title IV. A pro tem planning committee is organized and charged with the responsibility of developing preliminary material for discussion with all interested agencies and institutions. The decision is made to develop a prospectus for discussion with the U.S. Office of Education.
July 16	Spokane	Discussion continues on purposes, scope and function of a regional center. The pro tem committee organizes itself into four working committees to review materials and prepare the outline of a prospectus to distribute to institutions and agencies in the region. Pro tem group is to serve as an interim board of directors. Four-member executive committee is selected. Organizations interested in becoming involved are invited to send $10 to help cover planning expenses.
August 4	Portland	Executive committee revises proposal draft. Planning budget for period is prepared.

**Persons from Oregon and Washington had earlier met informally within their own states to discuss the concept of a regional laboratory.*

Meetings	Where	
April 1	Portland	Portland is recommended as site for headquarters. The subcommittee for selection of an executive director announces seven finalists and another committee is authorized to interview and select three finalists and make recommendations to the board. Suggestions from the ad hoc committee for membership and election of a permanent board of directors are presented.
April 11-12	Portland	USOE review panel visits with executive committee and interviews staff.
May 21	Portland	Acting director reports on significant items discussed at a Washington, D.C. meeting involving contract negotiations and budget.
June 2	Portland	A nontechnical report to be sent to every member agency is presented that projects the next year's activities of the lab. Joint meeting of the interim board of directors and the legally elected board is scheduled for June 15; permanent board to meet on June 16. The interview committee is requested to interview two candidates for executive director prior to the next board meeting.
June 15	Portland	Final meeting of the interim group. News that USOE has approved a contract for laboratory operation is presented. Executive director is elected.
June 16	Portland	New board takes charge and Northwest Regional Educational Laboratory opens for business.

HOW REGIONAL STAKEHOLDERS FEEL ABOUT "BUILDING CONSTITUENCY-I"

Looking back on those formative months, early NWREL planners recalled some additional high points during the hectic prospectus writing period and later during the preparation of the full-scale operational proposal:

1. Each member of the steering committee made a personal commitment--indeed a heavy investment--of time and energy, both in working on laboratory design and in making others aware of the potential of a regional educational laboratory.

2. There was a general feeling of excitement over the prospect of a new and dynamic organization. A spirit of give and take existed among members of the pro tem committee. No one felt wedded to a particular point of view.

3. Even though deadlines and guidelines were tight and perhaps "unreal," all participants agreed to meet them and not nit-pick with federal officials.

4. Subcommittees were directed to bring something concrete to work on for the next meeting so that members would waste little time. Every meeting ended with the next steps laid out clearly.

A majority of the 47 practitioners in the 1977 regional sample agreed on one important factor facing a new laboratory beginning anew: try to capitalize on what ten years of experience has taught other regional laboratories. "Now that we know what a laboratory is, let's use that model to establish credibility; build enthusiasm, confidence and understanding and trust; promote acceptance; and foster an image of R&D that is positive and helpful."

Another concern relates to continuation of funding and its effect on planning. In 1965, there were visions of laboratories funded at multimillion dollar levels for long periods of time--dreams that quickly vanished, never to reappear. Respondents in 1977 are gun-shy about funding commitments for possible new laboratories, believing that without some realistic level of assurance it would be dishonest for new regions to be considering plans for an R&D institution of their own.

Some practitioners believe that certain school district specialties should be better represented in the planning process--for instance, local staff development directors. However, another respondent warned of "over enthusiasm" of some interest groups who want to push their own cause to the fullest. Some practitioners also expressed uneasiness over "dominance" by state agency people in the planning process, apparently believing that state departments are not always at the "cutting edge."

Recognizing, as one official said, that "the second wave of labs will be tougher to bring off," other observers recommended adding two categories to be represented during the planning process: community members-at-large (e.g., from human services fields) and staff members of state education agencies even if the state school officer is able to take an active role.

Several persons noted that federal agencies (e.g., USOE regional offices) are now important factors in educational decision making and should be considered in the development of a new laboratory. Several respondents also believe that the face of education had changed so much at the state, local, regional and national level that the potential for jealous reactions from agencies and individuals to the entry of a new regional educational R&D institution is even greater than it was in 1965--pointing again to the need for a clear commitment to specific purposes established at the outset.

As a procedural matter, one respondent suggested keeping meetings small and efficient rather than large and possibly ineffective.

Based on present conditions, Northwest practitioners now see several key groups who need to be a part of the constituency building process in each state during a laboratory's formative period:

1. Local school staff. The eventual target for most laboratory products and services are staff people in local public and private schools. While public and private school administrators and teachers are typically enmeshed in day-to-day operational problems, many see how R&D processes and results can be applied effectively to their local situation--whether rural, urban or suburban; private or parochial; unified or nonunified.

2. Intermediate service units. While not found in every state, intermediate agencies are singled out here because of their growing influence as a vital link in the dissemination process. Staff in an intermediate unit are often the catalysts who get things going across district lines in a county or sub-state region. They know local school people well and can reflect emerging needs and issues that deserve R&D attention. Yet, the size and effectiveness of intermediate units is highly variable because they, too, must rely on a constituency-building process of their own. Local education agencies that demand a lot from their education service district will get a lot. For that reason, there may be only a handful of intermediate units in a state where real leadership is available for input during the planning phase of a regional laboratory.

3. State education agencies. State departments of education are often expected to follow traditional roles: maintaining certain "standards" within the state for school programs and facilities; overseeing financial disbursements; assuring quality support services to local schools in areas like textbooks, transportation, school lunch and commodity distribution, and the like. In the last decade with the advent of increased federal funding, SEA staff have increased in number and quality to administer flow-through categorical monies and to provide overall leadership in curriculum and instruction.

The uniqueness of each SEA is more a function of the chief state school officer (whether appointed or elected) charged with administering the agency. But, state leadership for education can also be dispersed. In some cases, the responsibilities of state educational governance may be split so that separate boards and executive officers administer elementary and secondary education, vocational-technical education, two-year junior or community colleges, and four-year colleges and universities. A coordinating commission or "super board" may also be a factor in some states. Yet, in planning a regional laboratory, when the target is K-12 teachers as was the case in 1965-66, a call to the state superintendent or commissioner sufficed and the chief's commitment was vital. Key staff were then assigned to represent the state in organizational deliberations if the chief state school officer could not personally take the lead.

4. Community colleges. Two-year community and junior colleges are not often mentioned in the original planning phase for regional laboratories since, in many states, they were then only emerging as an important option in postsecondary education and because they had little to do with teacher preparation or inservice per se. These public and private institutions have now become a dominant force on the American educational scene and offer training, retraining and enrichment programs for professionals and paraprofessionals alike. As is the case for LEAs and intermediate units, junior or community college usually operates autonomously; yet, a central board or professional association normally represents their interests in matters of program coordination, legislation and the like. As an important educational resource in many communities today, junior or community colleges need to be viewed as consumers of R&D products and services in the same light as elementary and secondary schools.

5. Teacher preparation institutions. Colleges and universities offering programs to prepare and certify teachers and administrators were seen as critically important in 1965, and as a result, public and private institutions alike were invited to participate in the planning. Indeed, many more persons were involved from this sector than any other single category (see chart, page 37). Coordination of public colleges and universities is again a variable matter with considerable autonomy left to each local campus. A state board may set policy for public universities, colleges or both and all four-year institutions may be linked through various formal and informal alliances. All staff in departments or colleges of education must be considered constituents of a regional lab, however, since they directly influence so much of what occurs in local school classrooms. Their time is often more flexible too, allowing the opportunity to participate in a laboratory's initial development and programmatic thrusts on a part- or full-time basis. Those universities that also operate "field service bureaus," "study

councils" or other mechanisms for serving local and state needs should obviously be considered as likely candidates for laboratory planning.

This is not to say that planners should ignore the academic disciplines on the campus--particularly since teachers-to-be spend a major part of their time in specialty study areas. Involvement of college staff not directly affiliated with the institution's teacher preparation program must be considered.

A dilemma facing a laboratory's planning committee is how individual as opposed to group interests will be represented. Can a local school superintendent speak for all superintendents of the state? Should the state group representing superintendents make the appointment? Here are some examples of key groups that have taken interest in NWREL from the beginning:

1. Associations of school board members. Lay citizens elected to serve on boards of education have seen their tasks become more complex since the mid-1960s, particularly as they try to balance quality programs against inadequate resources. For advice and training in how to carry out their responsibilities, school board members turn to their state and national school board associations as well as intermediate and state agencies. While they are usually suspicious of external and bureaucratic layers where resources might conceivably be drained away from essential school functions, perceptive school board members seek collaboration on common problems which cut across local boundaries.

2. Professional teacher associations. The emergence of strong teacher associations was already apparent in the mid-1960s and with national, state and local competition over who should speak for classroom teachers' rights, the roles and functions of these organizations have become clearer. In most states, the two forces representing teachers' interests are affiliates of the National Education Association and American Federation of Teachers. The former usually operates strong headquarters operations while the latter tends to focus its resources on local affiliates where representation has been won. How to know the best way to reach teachers as a generic group is a question to be resolved on a state-by-state basis.

3. Special interest professional associations. While "specialty" organizations have been around for a long time, they are now making their influence felt more vigorously both on the national and state levels. Examples include vocational educators, librarians and media specialists, health and physical education personnel, etc. Concerns about the needs of special groups have also spawned associations dealing with gifted, retarded, handicapped, and bilingual populations to name a few. All these groups will have R&D interests of their own that need to be weighed against broader concerns.

4. School administrators. Superintendents, central office administrators and building principals continue to hold memberships in large and influential national and state associations. Yet, while there are reasons for maintaining organizational identity, there is a trend toward confederation of such groups at the state level so that common causes facing administrators can be solidified. Administrators are usually the first line of contact as a laboratory builds field relationships and, as gatekeepers to their districts and buildings, administrators have a lot to say about what will or will not happen when it comes to participating in R&D activities or in the utilization of R&D results.

5. Other community groups. From the very earliest planning stages, laboratories were encouraged to use the noneducation-related resources of their region, particularly after operations were underway. Business, industry, labor and cultural interests were to be considered and used as appropriate in governance and product development. As the community recognizes the education functions it performs--via corporate training programs, church activities, mass media, public libraries, or whatever--it wants to play a greater role in educational R&D. While quasi-educational organizations like the PTA have declined in membership and influence, there is heightened community awareness of what schools are doing and how--the "back to basics" movement being one forceful example. Strong minority group interests are also taking their rightful lead in the shaping of educational policy and their interests must be considered in laboratory development.

HOW OTHER LABORATORIES REGARD "BUILDING CONSTITUENCY-I"

While other laboratory respondents are not unanimously enthusiastic about involvement of state education agencies in planning, they recognize the importance of these officials in making the initial entree into states. One board chairperson likened the role of SEA staff to the school principal who decides how things will be done in that building, noting that new laboratories would certainly want the state people "on your side and certainly not against you." Another lab director said point blank: "help state education agencies see you're not in competition."

All labs agreed that finding people who have good connections is critical when looking for steering committee members. One director was concerned enough about teacher militancy to wonder if teachers would participate in a professional manner in the formative planning process for a laboratory while the chairperson of the same lab's board disagreed, wondering if it's time to get teachers involved from the very beginning. Yet, another

laboratory director found that teachers did not "work out" in the planning phase or on the board because they felt "overpowered by the college presidents and bankers."

Another board chairperson felt that it's too easy for planning to be dominated by school administrators and college professors. One laboratory director would in fact look for one or more persons familiar with what R&D is all about since much more is understood today about that process in education. Another director, who has found particular success with noneducators on the board, would seek out key business-industry-labor people for participation in the planning process, too. He also noted that the same concerns about minority representation on the eventual board requires multiethnic participation in planning as well.

Interface was also a concern other laboratory respondents shared with Northwest respondents. Their advice to planners of a new laboratory included (1) look at what's happening within states (e.g., where are the strong, emerging advocates of R&D within state and intermediate education agencies); try to "sense the climate" for acceptance of a regional R&D agency; (2) avoid threatening any institution directly; instead, leave an image of "we can help" and give some examples of how; (3) contact your future constituency on <u>their</u> turf to avoid the ivory tower image.

Define Region

How far can we go?

Recognizing that political realities and traditional habits do exist, it has still been useful to establish one geographic area that serves as the focal point for laboratory operations. This does not mean that many common problems and interests are not shared by agencies outside a target region or that the laboratory may not conduct activities nationally or even internationally. Having a home territory, however, provides a solid base for governance, a natural setting for identifying R&D needs and testing new ideas, and a reality check when defining purposes and establishing priorities.

The value of a region is the contacts the laboratory and we can make with districts facing similar problems and the experts that can help.

--Assistant superintendent, suburban school district

The way it is now, labs are just arms of the federal government with Washington, D.C., pretty well calling all the shots since they control purse strings. "Region" doesn't really mean anything.

--Dean, college of education

Our states offer a natural regional alliance because of a commonality of interests. We try to do things together. Our broad geographic territory and small population give us one linkage and there are others.

--Chief state school officer

ONE LABORATORY'S APPROACH

While federal officials and their consultants hoped for a network of regional laboratories covering all geographic areas, they were unsure of the reaction they would receive from the field and were apparently amazed when some 40 initial proposals were submitted in October, 1965. Some early advocates thought there should be as few as seven or eight regional laboratories and surely no more than 15 while other visionaries could see the need for one in every state someday. By the time planning grants were awarded in mid-1966, it looked like there would indeed be comprehensive coverage of the nation with all states except Hawaii included in one or more regions (see map that follows apparently drawn in late 1966).

The decision by USOE to "let things fall as they will" was probably a wise one say NWREL's early planners. Rather than someone drawing lines on a map in Washington--though doodling of this sort may have happened, too--interest was allowed to bubble up freely across the states. In the Pacific Northwest, there were apparently several pre-existing conditions which influenced the eventual shape of the NWREL region: geography, kindred spirits, existing alliances, traditional practice and existing R&D performers. Out of this framework it was then possible for the constituents discussed earlier to identify common interests and needs.

How states and territories gradually coalesced to become the regional base for NWREL is illustrated on the following pages.

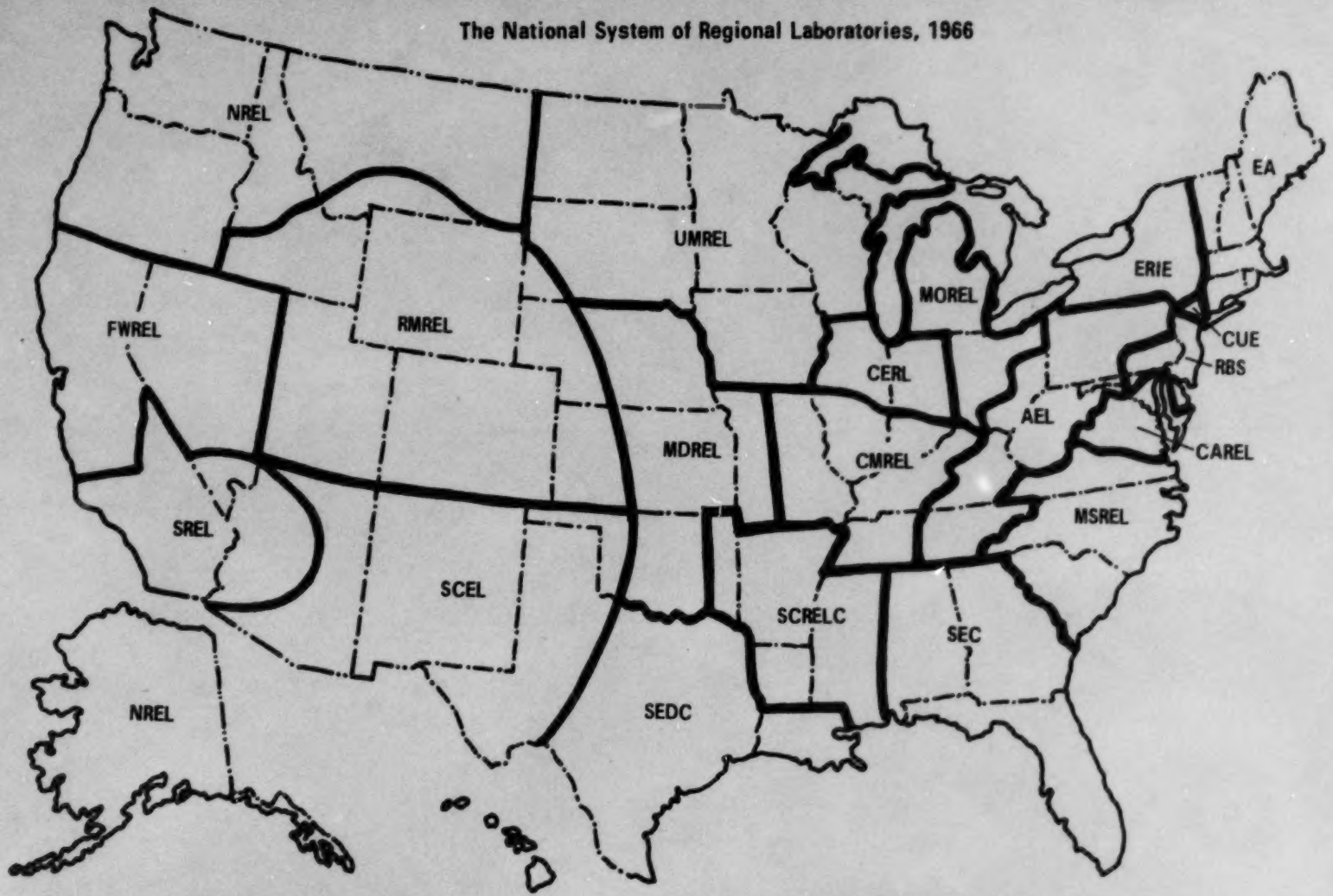
Geography

Geographical factors in the West are still a factor today even though transportation and communication linkages are steadily improving.

1. If there's one distinguishing feature about topography within and between states in the Northwest region, it is wide open spaces--broad expanses of water, mountains, tundra, desert, forests--requiring travel that is often time consuming and difficult to arrange. Yet, people living in the region are accustomed to distance and the time required to link people, products and services. Seattle and Portland are, in fact, transportation hubs both for the inland territory stretching eastward from the Cascade mountains as well as north and west to Alaska and southward into the Pacific.

2. Population patterns in the Northwest region also have similarities: relatively few large urban centers yet hundreds of small and isolated communities. Minorities are also relatively few in number but distinctive in cultural pride and contributions to a rich regional heritage. For example, the coastal, plateau and plains Indian tribes of western Washington, Idaho and

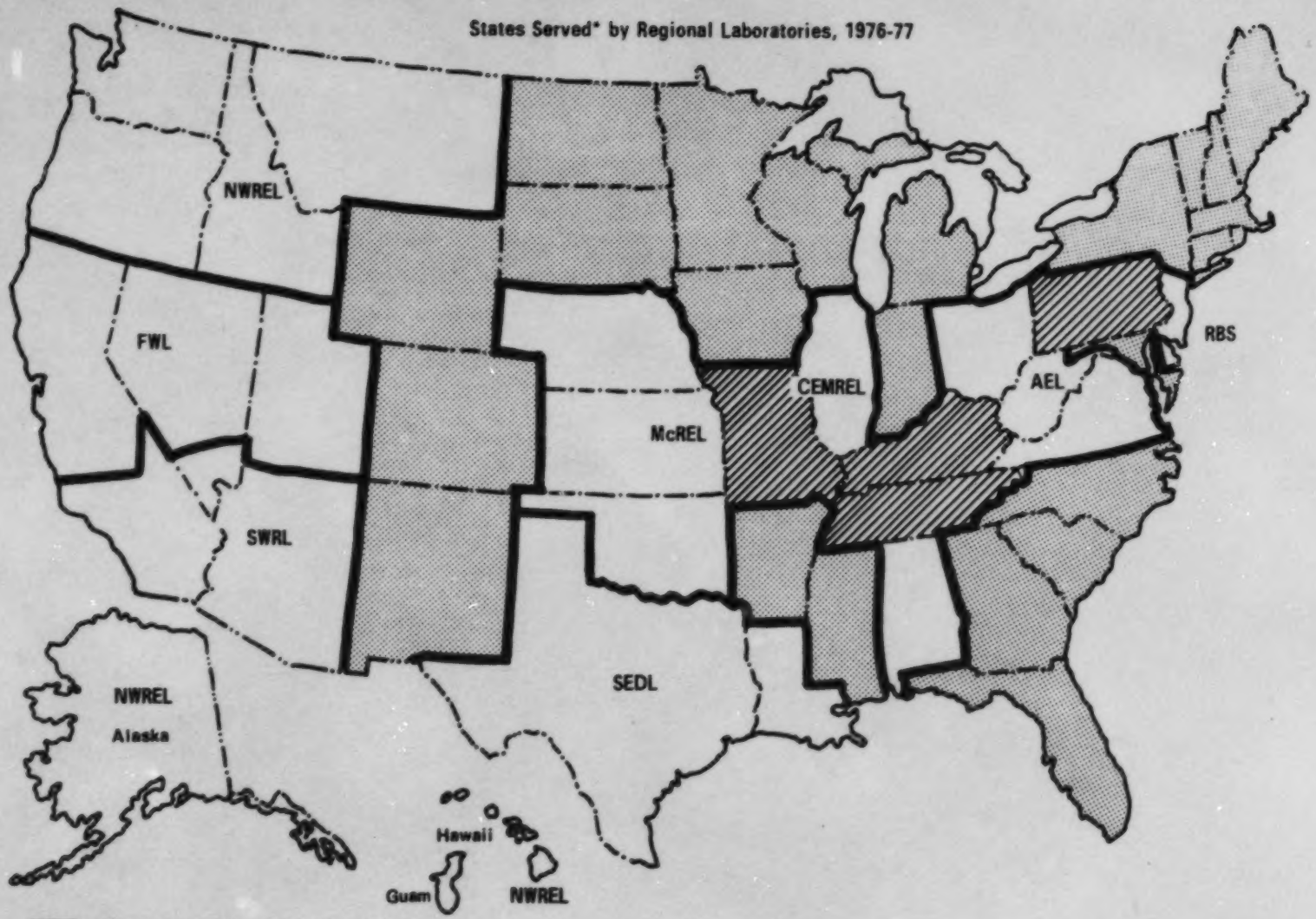
The National System of Regional Laboratories, 1966



EA – Educational Associates
CUE – Center for Urban Education
RBS – Research for Better Schools, Inc.
CAREL – Central Atlantic Regional Educational Laboratory
MSREL – Mid-South Regional Educational Laboratory
SEC – Southeastern Educational Corporation
ERIE – Eastern Regional Institute for Education
AEL – Appalachia Educational Laboratory, Inc.
SCRELC – South Central Regional Educational Laboratory Corp.
SEDC – Southwest Educational Development Corp.

MOREL – Michigan-Ohio Regional Educational Laboratory
CERL – Cooperative Educational Regional Laboratory
CMREL – Central Midwest Regional Educational Laboratory
MDREL – Mid-Continent Regional Educational Laboratory
UMREL – Upper Midwest Regional Educational Laboratory
SCEL – Southwestern Cooperative Educational Laboratory
RMREL – Rocky Mountain Regional Educational Laboratory
FWREL – Far West Regional Educational Laboratory
SREL – Southwest Regional Educational Laboratory
NREL – Northwest Regional Educational Laboratory

States Served* by Regional Laboratories, 1976-77



NWREL – Northwest Regional Educational Laboratory
FWL – Far West Laboratory for Educational Research and Development
SWRL – SWRL Educational Research and Development
SEDL – Southwest Educational Development Laboratory
McREL – Mid-Continent Regional Educational Laboratory
AEL – Appalachia Educational Laboratory
RBS – Research for Better Schools
CEMREL – CEMREL, Inc.

*"Served" means these states (or portions therof) provide the predominant governance base for one or more laboratories even though R&D activities may spread nationwide.

Diagonal lines indicate states that have traditionally been the "domain" of more than one laboratory.

Montana are distinctly different in terms of history and life style. Yet, there is a common bond that is manifest in an R&D approach to primary-level reading materials coordinated regionwide.

3. Climate is probably not a distinguishing element; yet, it demonstrates how alike R&D work settings can be in some very basic ways. Staff who have conducted R&D work in the frigid harsh North Slope in Alaska, the windswept cold winters and hot, dry summers of northeast Montana, and the nearly constant humidity and tropical heat of Guam describe similar problems in terms of teaching patterns, learning pace, community involvement, etc.

4. Trade and commerce also underlie regional ties. Much of the economic base in the Northwest region is agricultural: forest products, fishing, farming in particular. In more recent years, manufacturing and tourism have become important. And, too, there are occasional widespread concerns that bring the Northwest states together for joint problem solving across political boundaries--water and energy resources being two recent examples.

5. Topography and communication realities also play a role in the configuration of schools across the region. A common problem identified early in the laboratory's planning phase was the need to improve educational practices in small but necessary rural schools. These conditions certainly exist elsewhere in the nation, but visibility of the problem was manifest in the Northwest--thanks in part to state efforts already underway as the laboratory was taking shape in early 1966. A constituency was thus prepared to join forces across state lines to address common needs.

Kindred Spirits

States comprising the Northwest region also share some unique ties that are hardly formalized but still influential:

1. The chief state school officers of the small Northwest states feel a natural kinship and need for a concerted front when making their voices heard in Washington, D.C., and elsewhere. They enjoy opportunities to get together and share common problems.

2. Professional ties are often regionally focused--with teacher recruitment and administrative placement two examples where "family" ties are strong. For example, many Alaska teachers and administrators come from Washington, Oregon, Idaho and Montana.

Traditional Practice

School organizational patterns of the Northwest states also illustrated certain common characteristics in 1965-66:

1. Professional teacher associations characteristically worked with administrator and school board associations in a close, colleagial manner. Collective bargaining was then only an interesting innovation happening in the big, unionized districts in the East.

2. There was substantial homogeneity of the general population with members of most racial and ethnic groups accustomed to attending schools with mixed populations.

3. Private and parochial elementary and secondary schools have always served only a relatively few of the region's students--also a difference from certain other sections of the country.

Existing Regional Alliances

As NWREL began to take shape in 1965-66 and continuing through 1976, several regional planning and coordination efforts involved NWREL member states:

1. The U.S. Office of Education Region X office in Seattle serves all the NWREL member states with the exception of Montana and Hawaii and Guam.

2. The Western Interstate Commission on Higher Education (WICHE) encourages four-year institutions to work together to build specialty training programs in areas like veterinary science that can be shared reciprocally by member states. WICHE conducts a number of joint state activities and its region includes Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, New Mexico, Nevada, Oregon, Utah, Washington and Wyoming.

3. The Affiliated Tribes of Northwest Indians is an example of an important minority group that represents Indians and their educational interests in particular. The Affiliated Tribes organization serves the states of Oregon, Washington, Idaho and Montana.

4. The Northwest Association of Schools and Colleges is one of several accrediting agencies around the nation responsible for setting standards for secondary schools and postsecondary institutions and enforcing those standards to approach equivalency of credits. States involved in the Northwest Association include Alaska, Idaho, Montana, Nevada, Oregon, Utah and Washington.

5. The Western Regional Interstate Planning Project (WRIPP) began as a joint ESEA Title 505 effort to strengthen leadership and management skills for state department of education personnel in Oregon, Washington, California, Hawaii, the Trust Territories, Alaska, Guam, and Samoa in areas like program evaluation.

6. The Northwest Association of Private Colleges and Universities is an alliance of nonpublic four-year institutions that have felt the need to band together on common interests mostly in the area of legal and regulatory concerns but in financing matters as well. These states include Alaska, Idaho, Montana, Oregon and Washington.

7. The Pacific Northwest Regional Commission has concentrated its attention on the economic development area and related regional problems. It serves Oregon, Washington and Idaho.

Existing R&D Performers

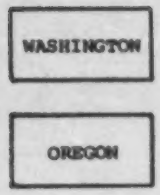
Another distinctive feature in the Northwest region during the mid-1960s was the fact that few institutions were conducting field-based educational R&D type activities:

1. Several university-based survey and service bureaus were at work in their own states with only occasional projects beyond state lines. The Kellogg and Ford Foundations had funded a number of large R&D activities through state and higher education agencies in several Northwest states in addition to USOE cooperative research activities on most college campuses.

2. The Center for the Advanced Study of Educational Administration located at the University of Oregon (CASEA) was one of the first USOE-sponsored R&D centers established in 1964. It was gathering an interdisciplinary staff, many of whom would carry joint appointments in other departments on campus. Teaching Research, a division of the Oregon State System of Higher Education was working on problems related to instruction at Oregon College of Education in Monmouth.

In the private sector, there were only a few firms or consultants available to provide the kinds of third-party evaluation and other assistance that federal programs were beginning to demand. The state department of education of each state was being faced with a variety of pressures to do more than administer rules, gather statistics, and try to provide leadership in traditional subject areas, yet, resources were not yet available for any significant effort.

THE EMERGING NORTHWEST REGION

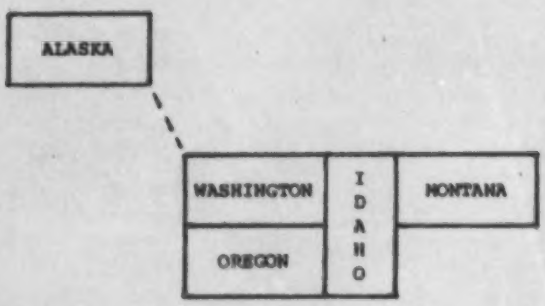


Spring, 1965:
States examine Title IV

Almost simultaneously in Oregon and Washington, groups of key individuals discuss possible responses to ESEA Title IV references to regional R&D centers.

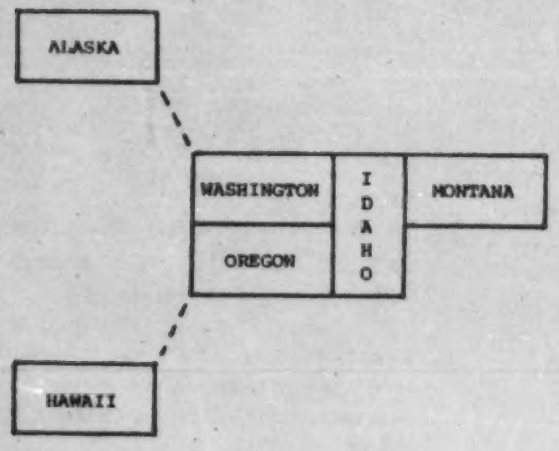
May 7, 1965:
Portland, Oregon

Washington and Oregon representatives meet to discuss possibilities of a regional response.



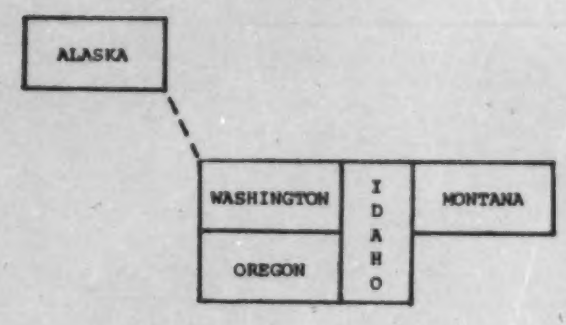
June 7, 1965:
Portland, Oregon

Representatives from Alaska, Idaho and Montana agree that the idea is worth pursuing further, too.



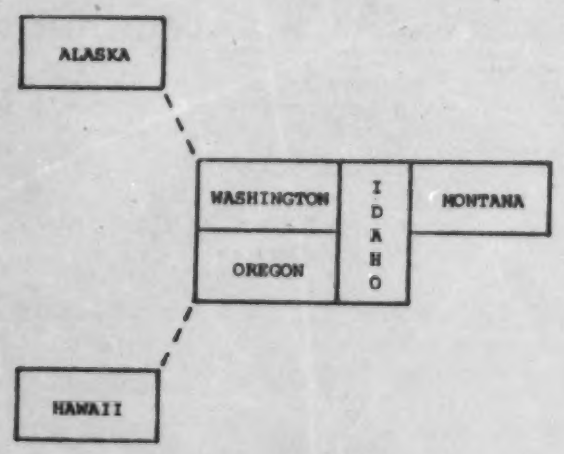
June 30, 1965:
Seattle, Washington

Representatives from six states gather to gauge interest and commitment and appoint a pro tem committee to draft the October prospectus.



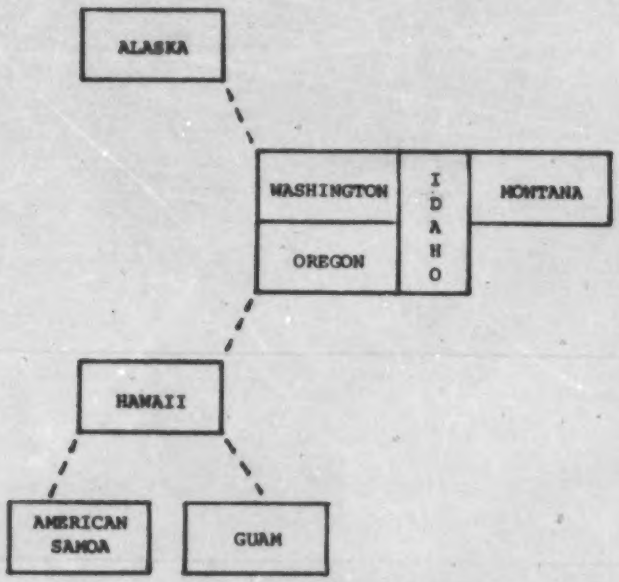
June, 1966:
Laboratory opens

Hawaii decides in late 1965 to explore a possible lab region in South Pacific with Trust Territories and Guam. NWREL Articles of Incorporation includes five states only.



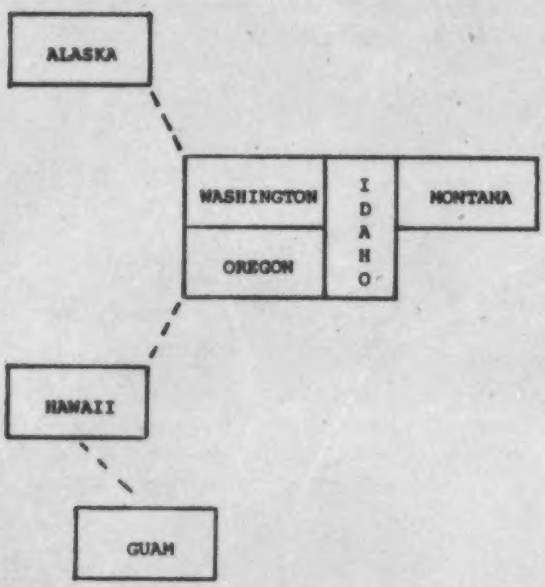
June, 1971:
NWREL welcomes Hawaii as Associate Member

Under amended bylaw rules, Hawaii seeks and is granted affiliate membership and one vote on governing board.



June, 1972:
Two territorial agencies seek associate status

Based on the strength of long-time laboratory contracts, American Samoa and Guam seek and are granted associate membership and one board position each.



June, 1975:
Samoa resigns affiliation

Because of government changes in American Samoa, membership by its chief state school officer on NWREL board of directors is withdrawn, even though laboratory projects continue there.

HOW REGIONAL STAKEHOLDERS FEEL ABOUT "DEFINING REGION"

All 47 respondents in the Northwest sample agree that the basis for forming a region should always be common interests and needs identified across a natural setting or broad area. Furthermore, these needs would predominantly be education-related but also recognize social and cultural concerns.

Another feeling expressed by respondents relates to the matter of contiguous states. Relatively few respondents believe that state borders need to touch each other. However, they warn that the greater the distance, the fewer the chances for interaction. Respondents feel that including whole states is preferable to carving off parts of states when it comes to drawing lines for regional laboratory jurisdictions. The consensus was that a region must make sense logically if it is to serve its constituents well.

"State boundaries make little sense when you look at large municipalities such as Vancouver, Washington, directly across the river from Portland, Oregon," said one.

There was unanimous agreement that states involved in a regional laboratory should be self-selected. However, there was some disagreement about the role of state education agencies in determining whether a state would be in or out. This is apparently a measure of distrust expressed mostly by local education agencies who are concerned about "the state" speaking for them. However, one old timer pointed out that politically there is no other agency as viable as the state departments when it comes to setting up and building upon effective working relationships in a state.

A few respondents voiced interest in the concept of boundaries for a regional laboratory shifting according to various needs and various purposes. An example might be as a rural education product developed at NWREL reaches fruition, it would be time to "extend the boundaries" of the Northwest Regional Educational Laboratory so that its product could be field tested and later disseminated around the nation.

While the effects of geography are visible and real factors in the region served by NWREL--with common linkages apparent in dozens of ways--some practitioners also wondered if there is a limit to how large a region can be and still provide effective representation on a policy-setting board which already numbers 26. The five states originally incorporating the laboratory each elect two representatives to the board in addition to the continuing membership of their respective chief state school officer. Any state or territory not affiliated with another laboratory may join NWREL as an associate member on resolution by its governing board and application to the NWREL board. Such associate members receive only one vote, that of their chief state school officer. Expense of paying travel and per diem costs for three full-fledged board officers from states that were original incorporators is one reason for the "associate" affiliation.

Six Basic Pieces in the Regionality Puzzle

Based on an analysis of NWREL's ten-year history as recorded in key documents, input on critical ingredients by the staff/board task force and the 47 field interviews, there seem to be six significant aspects of NWREL's "region" that stand out over the years.

1. Regional Symbiosis

   NWREL's region emerged out of a climate of togetherness--building on present practice and the strength of common needs, interests and desires shared across state lines.

   Evidence:

   - We're doing some of the R&D job already--but a laboratory can help us do more.
   - We believe enough in what you propose that we will not actively block it.
   - Our common concerns are strong enough to mount a sustained effort.
   - We're just plain excited enough to want to participate.

2. Regional Access

   NWREL's region is a natural territory to call "home," a space where people move with relative ease.

   Evidence:

   - We are accustomed to traveling in this area and seldom think twice about it.
   - We are large enough to reflect a "cosmopolitan" view of the world but small enough to justify efficient use of limited R&D resources.
   - We can initially identify quality expertise and leadership right here in the proposed coverage area and--in part because of our location--can attract additional talent as needed.

3. Regional Governance

   NWREL strives to make sure its policies reflect the concerns of its constituents, the people who expect it to be responsive and who will stand behind it through thick and thin.

Evidence:

- We have a board that represents key constituents in member states, but is not so unwieldy as to stifle communication, involvement and effectiveness.

- We have individuals on the board whose influence is not necessarily based on where they are from but what and who they know.

- We expect our board to decide who will be in or out of our region, what priorities will be addressed or not, what programs will be approved or not.

4. Regional Collegiality

The people associated with NWREL are marked by respect, credibility, trust, candor and warmth.

Evidence:

- We are comfortable because we trust the people involved in policy and leadership activities: they are honest folks.

- We are used to working with the kind of staff we see at the laboratory--our paths have probably crossed many times, or if they haven't, we would not feel like strangers when around them.

5. Out-of-Region Linkages

NWREL is capable of extending its activities beyond area borders when its unique resources are needed elsewhere or when its products are ready for testing in new settings.

Evidence:

- We have become aware of your obvious expertise which we believe fits a need facing us.

- We are willing to cooperate in field testing and training.

- We want to be part of your work even though we are not part of your planning and governance structure.

6. National Stature

NWREL can still keep roots established in its region while contributing to the improvement of educational practices nationally.

Evidence:

- We can see that the products of your work have a direct bearing on the needs of any education institution, no matter where it's located.

- You have a responsibility for sharing your work with anyone who asks.

HOW OTHER LABORATORIES REGARD "DEFINING REGION"

The seven other labs disagreed on several points regarding the definition of a region for a laboratory. However, in the final analysis, they see the importance of a strong regional base--particularly on the governance level. One laboratory director indicated that you define a region by "pointing to it," believing that while a regional base is important, it should not confine your programs or activities. "Being called regional is what's unique," this director said. "It gives you wiggle room to do the things formerly in no-man's land between research and utilization. A regional laboratory implies that you are close to practitioners yet understand and practice research as well." The chairperson of the board for that same laboratory sees great potential for a regionally based lab to help constituents look beyond their own problems. Yet, there was some feeling that a "region" makes very little difference when it comes to conducting R&D--except convenience in travel. "The school problems in Portland are not really different from those in Long Beach," he noted.

On the matter of whether states should self-select their region, all respondents agreed the question should always be left to state choice. One laboratory director, whose institution was designed to serve six "pieces" of states and only one entire state, believes that all of every state should be included in a region and this view is shared by his board chairperson as well. In those lab regions with split or "overlapped" states, board representation is sometimes sticky. A complication for the SEA representative arises, for example, should a particular lab program "favor" one part of the state and not the whole state.

As states examine the possibility of defining a region, one factor to keep in mind is the size of the governing board that would result if each state is to be represented adequately. On the other hand, noted one laboratory director, "If you're serving only two or three states, you tend to become part of them." Said another director, "You want to have states feel involved, not captured."

Another director feels that state lines represent too much of the traditional pattern and control that laboratories should help change. He is impatient with incremental approaches that say you gradually "chip away" at the establishment.

The overriding concern about regional size shared by the laboratories relates to ability to serve constituents adequately. "You can only keep so many things on your mind at once," said one director, wondering what would happen should his territory double in size.

Choose an Operational Site

Where's the best place to locate?

Deciding on a central spot to place a headquarters staff usually means identifying a population center that is linked to the region by a variety of reliable transportation options, that can draw on a pool of educational research and development resources and that offers the kinds of educational/cultural/recreational resources that will entice job applicants outside the region to relocate there. The obvious drawback of one operational center is that it will be placed in only one of the constituent states, raising the question about a need for smaller offices elsewhere to represent and carry out laboratory work.

How other service organizations view the problem:

If the rubber doesn't hit the road, regionality is not significant.

--Director, university school service bureau

Even though we have certain district boundaries established by law, we furnish noncontiguous regional services in areas like cooperative purchasing to one group counties, a set computer of services to another group and also run an administrator in-service program for two neighboring service agencies. Our location just happens to be ideal.

--Intermediate service agency chief

ONE LABORATORY'S APPROACH

Where the laboratory would be located proved to be one of the hottest topics to face the pro tem committee during the 1965-66 planning year. Even as the initial discussions were being held about the possibilities of a laboratory--and despite overt agreement that "the laboratory is a process not a place"--the natural question was "where will it be?"

After lengthy discussions (only a few of which are covered in official minutes), Portland and Seattle were designated as likely headquarters locations. Strong feelings were generated in favor of both metropolitan centers and elaborate rationales were proposed supporting each geographic area. During the planning process, one subcommittee had prepared criteria for site selection, leaving the actual recommendation to an ad hoc panel of consultants (five college presidents, one from each state in the region) brought in from the outside to make a final recommendation. Most who were part of that site selection process believe it is better to get the decision on a headquarter's location out of the way soon so that everyone's efforts can be focused on the real task of defining the laboratory's mission and programs. While the wounds over the choice of a site were deep for a time, most observers believe that once that decision was made--a hurdle that was indeed large at the outset--the pro tem committee members could focus their energies on coalescence of resources throughout the region.

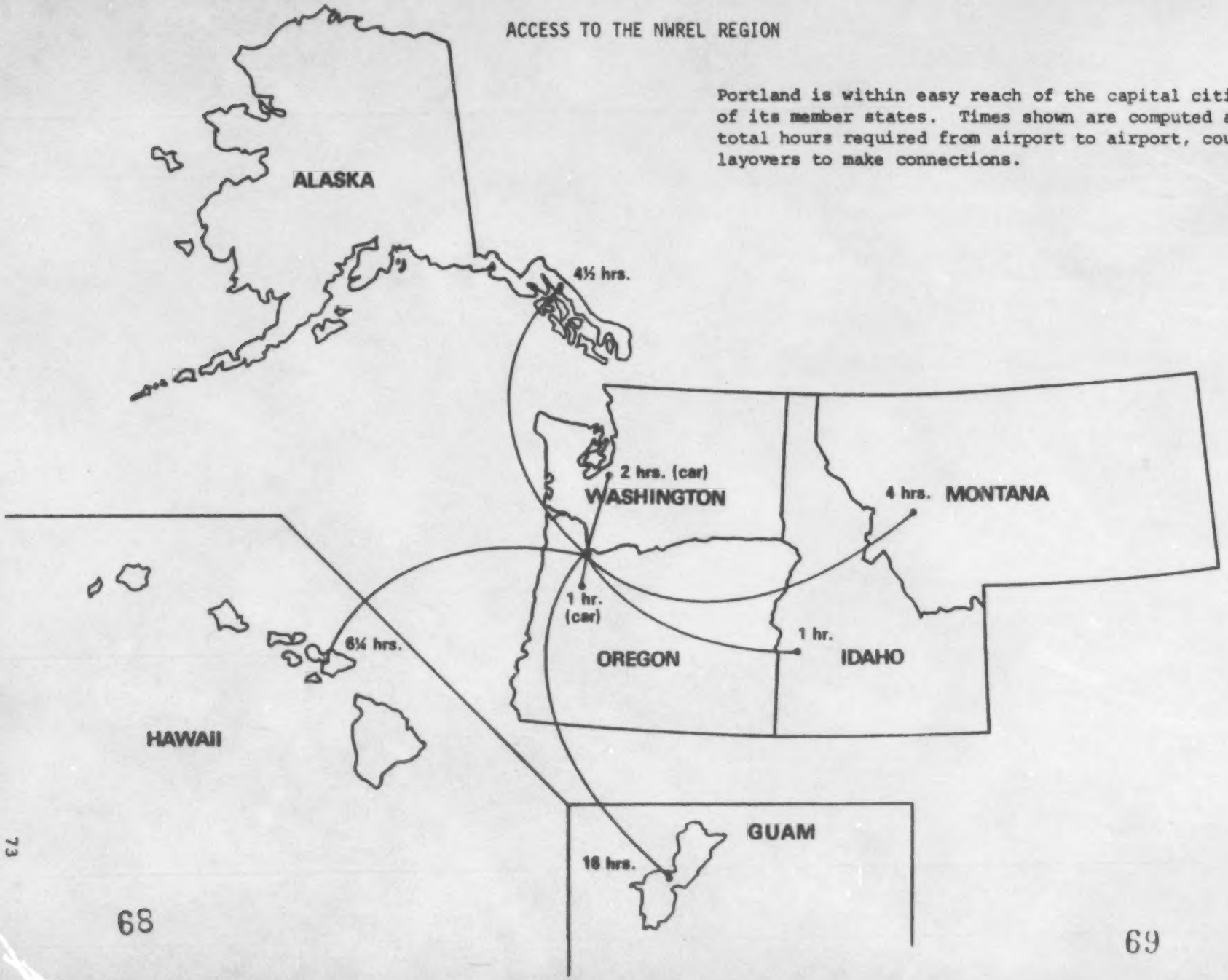
The decision to headquarter in Portland seemed to be a reasonable one, particularly in terms of access--the top criterion used by the subcommittee. Portland is within a three-hour driving distance for a substantial portion of the population in the two largest states in the region. Indeed, population experts in the mid-1960s were predicting a megalopolis (population corridor) stretching from Everett, Washington, north of Seattle to Eugene, Oregon, in the southern Willamette Valley of Oregon with Portland a convenient midpoint. Air service is direct and frequent between most Northwest cities and Portland and from Portland to points east, into the Pacific and north to Alaska.

Another continuing debate during the early planning process related to the establishment of field offices. Some persons felt the laboratory should maintain field offices or satellite centers in various areas of the region operating with their own small staffs as "arms" of the laboratory.

As the pro tem committee looked more closely at the feasibility of these ideas, however, consensus was there should be one headquarters and a solid track record established before broadening out from a central location. In fact, except while occupying temporary offices until October, 1966, the laboratory headquarters has been located in one building. In the early 1970s as the laboratory grew in size, scope and influence, however, it was apparent that certain contracts would require staff in close proximity to their tasks in the field if work were to be cost/effective. The board

ACCESS TO THE NWREL REGION

Portland is within easy reach of the capital cities of its member states. Times shown are computed as total hours required from airport to airport, counting layovers to make connections.



acted, then, to create project offices as required for intensive field activities in the following cities and states:

NWREL FIELD OFFICES
1972-1977

Agana, Guam	1968-1973
Anchorage, Alaska	1973-1974
Honolulu, Hawaii	1976-present
Los Angeles, California	1972
Pago Pago, American Samoa	1972-1975
Salem, Oregon	1975-present
San Francisco, California	1974
Tacoma, Washington	1970-1976

As a matter of practice, then, field offices have only been created and staffed to implement specific contracts for clients. That is, no other work of the laboratory would be handled by field staff. Should requests be received in the satellite locations, they are referred to the Portland office. Staff in field offices report directly to the same division directors as program and project officers in Portland.

The choice of facilities is another matter that must be given careful attention in the formation of a laboratory. When laboratories were first proposed in 1965, language in the act authorized construction of facilities on invitation of the Office of Education. Four laboratories and several R&D centers constructed buildings during the past ten-year period.

NWREL, however, was not invited to propose construction of facilities and gradually "took over" most of the seven-story Lindsay Building in downtown Portland. This structure--located adjacent to major freeways, bus lines, hotels, and downtown shopping--has proven to be convenient, flexible and adaptable for most laboratory needs. During periods of heavy growth in 1971-74, it was also necessary to secure office space in two other downtown office buildings to house particular programs and projects.

HOW REGIONAL STAKEHOLDERS FEEL ABOUT "CHOOSING AN OPERATIONAL SITE"

Ten years after the establishment of the laboratory in Portland finds most respondents rather satisfied with that decision; no one would apparently have wanted it any different now that they look back. The 47 interviewees offered this advice, however, to future laboratories planning to begin. If field offices are deemed advisable (and less

than five respondents thought they might be), a new laboratory must make sure top-notch, quality staff persons who are strong individuals with strong interpersonal skills are assigned there. There was some support for field offices conducting service work and answering inquiries as one-stop R&D centers. On the other hand, most persons believed that field offices for laboratories should only be established when a project or program demands that such a logical decision would be made.

A few respondents were concerned that being in one city or one locality can have drawbacks: staff and persons related to the laboratory tend to "inbreed" and "feed on" themselves rather than reaching out and remembering their regional base.

The dominant factor in 1977 just as it was in 1966 is transportation availability. Again, in the case of the Northwest Laboratory, the choice could only be two cities in terms of overall convenience both in the region and nationally.

Several respondents in the Northwest survey wondered if the laboratory should consider the possibility of using its trainer network as advocates of the laboratory throughout the region. In effect these persons become "field offices" of the laboratory--repositories of information about what the laboratory is doing, where and how. Several respondents even suggested these persons could be paid a small stipend for their liaison role between practitioners and the laboratory.

HOW OTHER LABORATORIES REGARD "CHOOSING AN OPERATIONAL SITE"

None of the respondents from the seven other laboratories had any particular new advice to offer on the selection of a site with easy access to the region and Washington, D.C., being key. One of the other laboratories does operate a small general purpose satellite office in an adjacent state; however, it does not attempt to offer a full range of services and the office is viewed more as a liaison effort between that state and its constituents and the main laboratory headquarters. Those that tried to operate subregional "service centers" soon abandoned the practice, primarily because of expense. Other labs also operate project-specific field offices as required by various contracts.

Build Constituency-II

Who should monitor progress?

In the press of planning and conducting its work, staff of a regional laboratory can easily overlook the people whose needs and interests are to be served and who will judge the quality of its performance. It is through planned field relationships where vital support is nurtured--support that will be there despite the vagaries of federal policies and funding.

A regional laboratory can identify long- and short-term problems, break those problems into manageable parts and set up a communications network that will bring teachers, administrators and school boards back together on their common purpose: teaching kids.

--Executive secretary of state school board directors association

Local schools will have a lot more respect for R&D if it's explained in simple, logical terms how it benefits their work.

--Former associate state superintendent

Somebody in every school district should be an advocate of the various ways their region's laboratory can influence and change educational practice.

--Principal, elementary school

ONE LABORATORY'S APPROACH

NWREL has followed a consistent membership policy since its first operating proposal was submitted to USOE during the spring of 1966:

1. Any organization in member or associate member states interested in the work of NWREL may join by submitting a resolution passed by its governing board requesting membership.

2. No payment of a membership fee is required.

3. Individuals are not allowed to join.

The reasoning behind the policy is this: to explain why an organization should affiliate with the laboratory requires that its executive officer become familiar with NWREL and its R&D work. By understanding what R&D is and what it can do, both the administrator and the board become aware of how their organizations can actively participate in the improvement of educational practices. Benefits of membership include:

1. Potential selection as collaborators in the R&D process:

   - Trial users of new products
   - Members of an advisory board
   - Reviewers of draft materials

2. Participation in the nomination and election of two NWREL board members from their state to represent local interests and concerns.

3. Participation in needs identification activities to help the laboratory board set program priorities.

4. Access to news of NWREL activities and services through a monthly newsletter (Memberandum), announcements of new laboratory products via catalogs and special mailings (the Northwest Report), and an annual report to members covering all programs and projects completed or underway during the previous calendar year.

One contact person in each member agency is always designated as the voting member even though others in the member institution may receive the mailings listed above. For instance, in a member school district as large as Seattle, the superintendent would likely be the contact person while all building principals receive the regular monthly newsletter and product announcements as well.

Over half of the present 812 members of the laboratory were already "on board" when the laboratory opened its doors in June of 1966, partly the

result of a drive to secure $10 contributions to help pay expenses for typing, printing and mailing the original prospectus. The 1977 membership of NWREL is illustrated on the chart that follows. A state-by-state display is included in the appendix.

An analysis of membership patterns reveals several interesting trends, however.

1. There has been no concerted membership "campaign" since the laboratory's formative years.

2. A high-water mark in 1971 with 826 members has gradually dropped back to 812, primarily because of school consolidations.

3. Meanwhile, a number of potential members has not been reached (e.g., community colleges).

HOW REGIONAL STAKEHOLDERS FEEL ABOUT "BUILDING CONSTITUENCY-II"

Northwest practitioners made several observations about the laboratory's membership policies:

1. More services for members should be considered. These might include invitations to attend conferences sponsored by the laboratory or interactions with consultants the laboratory brings into the region for special work.

2. Some respondents wondered why organizations with governing boards are the only ones that can apply for NWREL membership, particularly when board members and staff members change and newcomers may not be aware of the lab's mission and services as the organization was when their resolution to join was first passed.

3. The laboratory should "train" its membership in how they can use techniques in their own local settings.

4. Some persons expressed an interest in annual meetings of members, perhaps in each state.

5. As a "fee" or evidence of commitment as a member of the laboratory, members might be invited to invest their time in a review of products, for example.

1976

MEMBER AND ASSOCIATE MEMBER INSTITUTIONS	Alaska	Idaho	Montana	Oregon	Washington	American Samoa	Guam	Hawaii	Totals
State Departments of Education	1	1	1	1	1	1	1	1	8
Schools and Districts	27	81	79	113	157	-	-	7	464
Private/Parochial Schools	7	3	4	7	8	-	-	1	30
Intermediate/County Schools	-	-	9	18	12	-	-	-	39
Colleges/Universities	5	5	9	27	30	1	1	-	78
Professional Associations	6	6	2	58	55	-	-	-	127
Cultural Agencies	1	-	2	5	4	-	-	-	12
Business/Industry	-	-	1	4	7	-	-	-	12
Others	2	3	3	27	7	-	-	-	42
TOTALS	49	99	110	260	281	2	2	9	812

HOW OTHER LABORATORIES REGARD "BUILDING CONSTITUENCY-II"

Other laboratories generally have not found building a membership base to be a useful activity. One laboratory created categories for paid membership (individual, institutional, patron) and so far has found limited success in generating much revenue or many members. Instead, each laboratory considers its region and its sundry institutions, agencies and individuals as "the membership." In those laboratories, however, the problem becomes one of knowing how to reach what constituency, in what manner and for what reasons.

At least two laboratories have tried having annual state meetings. Those that tried to have large regional annual meetings found the gatherings generated little enthusiasm and sparse attendance.

Mailing regular newsletters to an amorphous membership has not been successful either, at least in the case of one laboratory which finally gave up its news publication. At least one lab continues a monthly newsletter for interested persons.

What to give in return seems to be the biggest issue relating to membership. One laboratory is investigating ways of using existing networks (e.g., state education agencies and intermediate units) as the way to reach its primary constituencies across the region. All try to maintain good communication with their important constituents--hoping, as one director put it, "they will not bad mouth us."

Create Institutional Framework

How will the organization be structured?

A regional laboratory requires an interstate superstructure or legal entity to receive funds and conduct work--typically a nonprofit corporation. Governance is usually in the hands of an active, committed board of directors broadly representing constituent interests and able to set policies and recommend program priorities for management and staff to implement.

You have to have users represented on your board if you really hope products will be accepted. They will keep you honest.

--Executive, state school board association

The nature of a regional laboratory--its relative freedom from other influences--should keep it at the forefront in staying ahead of problems. It must be proactive rather than reactive.

--Planning coordinator, state department of education

ONE LABORATORY'S APPROACH

Incorporation

With the advice and assistance of an attorney, incorporation as a nonprofit institution in most states is a rather easy process. In early 1966, NWREL established its corporate identity in Oregon but also named resident agents (who were interim board members at the time) located in the other four signatory states of the region. In addition, NWREL has also qualified as a charitable organization should individuals or institutions wish to make tax-free donations or contributions to support its work.

Becoming a private, nonprofit corporation has had some real benefits for NWREL--but some drawbacks as well.

ADVANTAGES	DISADVANTAGES
1. NWREL is not beholden to any existing agency. No one can say the laboratory is the arm of a state department, higher education agency or any established institution. All of the laboratory's key constituents have an equal chance to say "this is ours."	1. As an independent agency, it can be mighty lonely should times become lean and there is no established, prestigious agency to protect the laboratory's interests.
2. NWREL is not bound to civil service requirements as are federal and state government agencies nor is the laboratory committed to tenure rules for the protection of staff.	2. Even with a ten-year track record marked by skillful recruiting and fair personnel policies, it is sometimes difficult to attract top quality candidates away from established institutions. In the formative years, higher-than-average salaries were a necessary enticement.
3. NWREL is free to arrange its own facilities and support services. It is not subject to "higher review" (e.g., state legislative approval).	3. There are always institutions that have space and resources available to share, yet close proximity to one institution can be viewed with suspicion by others.

	ADVANTAGES	DISADVANTAGES
4.	Nonprofit status allows members to be both clients and representatives on the board of directors. This helps assure that R&D services are provided at the lowest possible cost. It also assures participation of key decision makers in policy setting.	4. If the laboratory were a profit-making organization, it could likely manage a substantial return on investment judging from the number of private R&D and consulting firms now available nationally.
5.	NWREL staff devote full attention to current work and are not allowed to "moonlight" on the side without approval of the executive director. Salaries and benefits have tended to be slightly higher than those typically found in colleges and universities, for instance, to offset that fact.	5. Because NWREL employees are not allowed to increase their earnings by consulting in their areas of expertise within the region, those who are accustomed to extra jobs in their specialty for supplemental income are not always attracted to NWREL.
6.	NWREL staff can be moved quickly--within specific policy and procedural guidelines--to respond to the rise and fall of contracted work.	6. Staff who prefer organizational stability and the protection of seniority or a guaranteed contract are often unhappy workers.
7.	Even though work is carried out within traditional contracting procedures and rules in each state, the laboratory is able to conduct work in any other state without concerns about interstate commerce rules, income tax considerations, etc.	7. Clients sometimes confuse nonprofit status with "free" services. Some are concerned about overhead charges necessary to sustain laboratory support functions. Equity fund is too low to maintain stability in rough times.

Bylaws

The operating framework provided by a short, simple set of bylaws is not as cut and dried as the Articles of Incorporation. Almost as many hours were spent pounding out how the organization would be structured as were spent defining the first programs at NWREL. Many interests had to be weighed and dozens of political needs satisfied--or at least put on the table for all to see. While a set of bylaws provide the framework for an organization, it is in written policies and procedures where the mission and day-to-day operations of the laboratory receive their greatest clarity. After ten years of experience, organizations accumulate detailed processes for the conduct of work and changes are frequent. Such has been the case for

NWREL where a Procedures Manual, now some three inches thick, guides daily decisions throughout the organization.

The Board at Work

NWREL's board of directors is composed of 26 members: two elected representatives from each of the original incorporating states, the chief state school officer from those five states plus the two associate member states, and nine additional persons elected by the above 17 directors to assure a balance of views. It meets four times a year--September, December, March and June. The board's executive committee--composed of the chairperson, vice chairperson, secretary-treasurer and two elected members--will usually have met as a group at least once in the interim and conduct other business via conference calls, mail, or telegrams as required.

The day prior to the regularly scheduled board meeting has traditionally been set aside as a time for the chief state school officers of the region to meet separately and discuss common concerns with top laboratory staff and other regional officials (e.g., USOE Commissioner for Region X). For example, the chiefs' session prior to the December, 1976 board meeting focused on recent work by the Western Regional Interstate Planning Project (WRIPP) on evaluation techniques with the agenda featuring case studies of evaluation efforts in each member state. This workshop allowed the chiefs to learn for themselves how evaluation results are being used in decision making. Chiefs from Alaska, Hawaii, Idaho, Oregon and Washington were present as were state department representatives from Montana, Guam, the Trust Territory and California (the latter two being members of the WRIPP consortium). Part of that same day-long meeting also covered a new laboratory contract with USOE to provide technical assistance for each state in the evaluation of Title I programs.

A typical NWREL board meeting requires a full day's time although in the early years, two days were required. Board members are not paid for their service, but travel expenses and per diem are provided for all. For some members, a board meeting will require two nights away from home to accommodate travel schedules. On only one occasion has the meeting been held in a city other than Portland, the exception being a meeting in conjunction with a laboratory exhibit at the Spokane World's Fair in 1974. (A proposal now being considered by the board, however, calls for rotation of board meetings to key cities in the region with only one meeting per year in Portland.)

During the week prior to a board meeting, members receive an information packet containing minutes of the prior session and material for study and consideration on the coming agenda.

A typical board meeting agenda runs something like this:

1. Approval of minutes from previous meeting and executive committee actions. The entire board can either approve, disapprove or seek further clarification of any actions taken or recommended by the executive committee.

2. Report on chief state school officers meeting the day before. This summary is usually provided by one of the participating chiefs and is designed to share emerging concerns with the entire entire board.

3. Relationships with NIE. Because a significant portion of the laboratory's business is with NIE and because of the fast-changing scene in Washington, board meetings allocate time to reports from the executive director on the current status of activities with the Institute. A special board committee appointed by the executive committee had met twice during the time between the December and March meetings to review 3 to 5 year priorities and program plans. This committee's report required both discussion and action during the March session to give the executive director the go-ahead to plan with NIE.

4. New contracts. The board receives a complete listing of all contracts negotiated in the previous quarter and may review and question any of the work the executive director has entered into.

5. Projected rate of business. The executive director provides an updated projection of anticipated revenues for the rest of the current fiscal year based on continuation of present contracts and firm expectations for new work.

6. Completed contracts. As each contract over $10,000 in size is finished, a special board report is prepared indicating source, purpose, outcomes, and gains/losses (for fixed price contracts) or underexpenditures/overexpenditures (for cost reimbursement contracts).

7. Personnel. Staff hirings, terminations, and vacancies are reported to the board for information only. In recent meetings, work on affirmative action plans has been reported. Certain other personnel matters--e.g., salary base changes--may require board action.

8. Program reports. Each of the board meetings features reports from one of the programmatic divisions. The format gives each program and project director about ten minutes to describe current work with emphasis on field relations and impact. The board also receives single sheet cost/progress reports from all ongoing programs and projects over $10,000 in size.

9. Marketing status. Sales of laboratory products are featured in this report with emphasis on the previous quarter as well as the entire marketing life of each item. Trends and upcoming products are also discussed.

10. Financial reports. Typical financial reports cover assets and liabilities, comparative statements of operation, equity analysis, and any other items of special interest to the board involving dollars.

11. Other business. The range of special topics requiring discussion and action include applications for membership, filling board vacancies, setting meeting dates and any items the board members themselves wish to raise or reports they wish to consider.

The conduct of NWREL board meetings is typically fast-paced and action-packed. On the average, about one-half of every meeting is donated to "program" matters and about one-half to "policy" matters. Staff participation is limited to the executive director who calls on other laboratory staff personnel as needed for special reports. The chairperson, who has held that post since the board was officially established in 1966, works closely with the executive director to separate the policy-level functions of the board from administrative and operational functions that are the responsibility of management. Certain board members often pay particular attention to areas of personal and professional interest reflecting the constituency they represent. For example, a teacher association representative will ask probing questions about salary, benefits and personnel matters; school administrators wonder about the efficacy of certain programs in their states; women and minorities might raise concerns about balance and equity in staff hiring and on advisory committees, etc. Board suggestions are always carefully considered. Actions taken are in turn reported to all laboratory staff following each meeting.

In following organizational bylaws, the NWREL board of directors is always concerned about representativeness. When filling appointive positions, names are generated by board members themselves prior to the June "organizational" meeting of the board at which time other names may be submitted spontaneously for election. Appointed board members typically are selected for their recognized stature in a particular field; for their knowledge of R&D; for their linkages at state, regional and national levels; for their ability to articulate an underrepresented point of view (e.g., women, minorities); and for their state of residence if it is desirable to achieve a better geographic balance among appointed positions. Present board members and their classification are listed on page 91.

NWREL's board has made provisions for a periodic external review of laboratory operations by a panel of consultants or knowledgeable experts. Such external reviews follow an agenda established by both board and management: staff organization, dissemination policies, balance of evaluation and research, program priorities, etc. Much like a financial audit, these external reviews actually are built from a pattern established by USOE in the early years of institutional funding for laboratories. Now, however, data are used for internal planning purposes to supplement the board and staff's own information.

Deciding what the "Immovables" Will Be

NWREL's bylaws have seen little revision since 1966. Over the past decade, there have been at least two fundamental precepts in NWREL's bylaws that have stood the test of time:

1. An early and strong commitment to chief state school officers as key leaders in education. No matter what else happens during the election of board members at NWREL, the chief state school officer of each state is guaranteed a voice regardless of who happens to hold that office at the time. As will be seen later, this is not a commitment that is shared unanimously either by NWREL's own regional constituents or by the other laboratories. Yet, it does demonstrate that NWREL planners and board members believed that a regional laboratory must work with and through traditional educational structures if productive change is to occur.

2. A conscious effort to keep the region manageable in size. The board has acted favorably on the associate membership of American Samoa, Guam and Hawaii in recent years, thus allowing the chief state school officer for those states and territories to sit as full voting members. As other states put out "feelers" about the possibility of joining the laboratory as full, equal partners, however, the NWREL board did not encourage their formal application for several reasons:

   - One state was in a region served by an existing laboratory.
   - Costs for reimbursing for travel and per diem of three board members looked awfully steep at the time.
   - Some directors thought the laboratory would be spreading itself too thin at the program and project levels where efforts are often made to represent all states in advisory board and R&D activities.

   All of these states, however, still have been actively involved in laboratory activities both as clients and collaborators. And, this does not mean that action by a different board of directors might grant full partnership to states that make a strong case.

CLASSIFICATION OF NWREL BOARD MEMBERSHIP

March, 1977

		*
Academic Disciplines		
Charles K. Ray	University of Alaska, Fairbanks	E
Business, Industry and Labor		
Lloyd B. Knudsen	Labor Representative, Portland	A
Classroom Teachers		
Patricia Benavidez	Tacoma School District, Washington	A
Community Organizations		
Joanna Bear	Nez Perce Tribal Council, Idaho	A
Hazel G. Hays	Albina Human Resources Center, Portland	A
Elementary School Principals		
Rita M. Millison	Anchorage Borough Schools, Alaska	A
Higher Education		
Thomas O. Bell	University of Idaho, Moscow	A
George B. Brain	Washington State University, Pullman	E
Richard L. Willey	Idaho State University	A
Private and Parochial Schools		
John J. McCoy	Superintendent of Schools, Helena Diocese	A
Professional Organizations		
Robert Van Houte	Alaska Education Association, Juneau	A
Public School Administrators		
John Anttonen	North Slope Borough Schools, Alaska	E
Jay W. Casper	Idaho Falls School District, Idaho	E
Rulon M. Ellis	Pocatello School District, Idaho	E
Howard F. Horner	David Douglas School District, Oregon	E
Milton K. Hegus	Bozeman School District, Montana	E
Roy Seeborg	Astoria School District, Oregon	E
William A. Serrette	Billings School District, Montana	E
Robert H. Woodroof	Edmonds School District, Washington	E
State Departments of Education		
Frank B. Brouillet	Superintendent of Public Instruction, Washington	C
Charles G. Clark	Superintendent, Hawaii State Department of Education	C
Verne A. Duncan	Superintendent of Public Instruction, Oregon	C
Marshall L. Lind	Commissioner of Education, Alaska	C
Georgia R. Rice	Superintendent of Public Instruction, Montana	C
Albert T. San Agustin	Director of Education, Guam	C
Roy Truby	Superintendent of Public Instruction, Idaho	C

* E - Elected A - Appointed C - Continuing Member

HOW REGIONAL STAKEHOLDERS FEEL ABOUT "CREATING INSTITUTIONAL FRAMEWORK"

While some respondents believe that incorporation does help maintain a separate identity, they do not feel the mere fact that the laboratory is a nonprofit institution with no formal ties to any existing power structure assures neutrality. Several believe that even as a separate, nonprofit corporation, a laboratory must work hard at not tying itself too tightly to the apron strings of any existing organization.

All agree that bylaws should be as simple as possible and that the membership should have a chance to examine those bylaws from time to time for their relevance. They agree that the membership should elect a substantial portion of the board of directors. As far as board makeup is concerned, some respondents believe there should be greater teacher representation on the board; but on the other hand, one school board association director feels that the number of professional educators should be kept to a minimum.

Several respondents indicated some concern, however, about categories that have tended to become overrepresented. One issue relates to size of local school districts, with respondents believing that superintendents from larger districts have outnumbered small and rural districts. Furthermore, some respondents believe that the laboratory's board has tended to become "ingrown" and that it has, in some cases, reappointed persons from the same or similar groups rather than reaching out for new ideas and new input throughout the region. This view was corroborated by a present board member who observed that the reason why there may be overrepresentation of school superintendents is that by far the most members in each state are school districts with nomination and balloting handled by the superintendent. When election time rolls around, school superintendents are apparently more likely to vote for one of their nominated colleagues than for someone they may not know.

As a general recommendation, several respondents believe that the board of a regional laboratory should never simply "rubber stamp" management proposals and that it may wish to include among its members several devil's advocates who can voice constructive criticism about laboratory efforts and regional needs.

Some respondents believe the board has not been able to really represent the interests of the region in determining program priorities because "the destiny of the laboratory is still controlled in Washington, D.C." Others believe that federal funding policies in recent years have fairly well removed regional input into the decision-making process. They believe this may be the reason in fact for some slackening off in the laboratory's efforts to involve a wide number of people in its work through advisory committees and related activities.

Recommendations for a new laboratory preparing to appoint a board of directors include:

- Look for potential board members willing to devote sufficient time to their work on the laboratory's board.
- Try to achieve a good balance among social structures (e.g., minority groups) on the board.
- Let board members from the various states serve as the laboratory's "gatekeepers" in their state. Use them as advocates and as listeners who can both feed forward and feed back information about laboratory programs and priorities.

Several of the 47 respondents in the Northwest survey do not agree with the NWREL bylaws provision that chief state school officers hold protected positions on the laboratory board. However, they agree that state agencies should be represented. The primary reason for their questioning of this policy relates to the busy schedule and responsibilities which burden chief state school officers today. They wonder if subordinates might do a better long-term job of representing a state's interests. These same respondents believe, however, that chief state school officers should still meet regularly as an ad hoc advisory committee providing direct input into laboratory planning.

Northwest respondents agree that the laboratory's role as a nonprofit corporation has been successful. They feel that a profit-making organization might not be as open and responsive to regional needs.

HOW OTHER LABORATORIES REGARD "CREATING INSTITUTIONAL FRAMEWORK"

The pattern for board representation at each other laboratory reflects differences in style, mission and political circumstances in each region:

Lab M

Number of states constituting regional base: 7

Number of board members: 38

How selected: Each member state chooses one from the following categories:

- Chief state school officer or designee
- Representative of state school superintendents association
- Representative of doctoral degree-granting institutions
- Representative of nondoctoral, teacher-training institutions

The board then selects 10 at-large members from organizations, enterprises and institutions not mentioned above.

Lab N

Number of states constituting regional base: 3

Number of board members: 26

How selected: Each signatory appoints one or more members with representation from the following institutions:

- State universities
- Private universities or colleges
- State colleges
- Private schools
- State departments of education
- County superintendents
- Local school districts

The board appoints seven directors: five at-large and two from private universities or colleges from any of the three states. The lab's executive director is an ex officio member of the board.

Lab O

Number of states constituting regional base: 3

Number of board members: not exceeding 24

How selected: Five persons elected by the board, one from each of the following categories in each state:

- Urban public school systems
- Suburban/rural public school systems
- State education agencies
- Parochial and private elementary and secondary schools
- Institutions of higher learning

Remaining members, an even number from each state, are to reflect backgrounds in commerce, industry or have a demonstrated interest in education.

Lab P

Number of states constituting regional base: 2

Number of board members: not exceeding 24

How selected: The board decides for itself who shall sit on the body, trying to be broadly representative of institutions and organizations interested in elementary and secondary education. As a matter of practice, there has been an equal number of directors from each member state.

Lab Q

Number of states constituting regional base: 3

Number of board members: 18

How selected: Each signatory appoints one or more members so that there will be representation from:

- State universities
- Private universities or colleges
- State colleges
- State departments of education
- County superintendents
- Local school districts

The board elects six directors: three at-large, two from private universities or colleges and one from a private research organization. The lab's executive director is an ex officio member.

Lab R

Number of states constituting regional base: 4

Number of board members: 18

How selected: Board determines categories to be represented and elects members as needed to fill vacancies.

Lab S

Number of states constituting regional base: 4

Number of board members: 15

How selected: Board determines who it wants to elect based on the person's strengths and influence. Ten are selected from the region and five outside. There is usually a 50-50 split between professional educators and noneducators.

Laboratory directors and board chairpersons from the seven other laboratories were most concerned that boards appointed in new laboratory regions must maintain a balance of representation with provisions for continuity and rotation of members. A general pattern is for directors to hold staggered three-year terms. They believe continuity is important, but to insure that plenty of new ideas are fed into the board, rotation of chairpersons is also suggested. One board chairperson, the dean of a major college of education, admits that perhaps his board has become too heavy with school administrators and college professors (the charter says 10 of the 26 members of his board must come from higher education). One of the other laboratories, while admitting that continuity is useful, has been concerned that one-third of its present board are ten-year veterans.

Several laboratories designate state education agency representation on the board, yet none guarantee the chief a seat. One director asked, If the chief state school officers, why not the chancellors for the state's system of higher education?" Several respondents believe that state agencies often have very little respect within their own states and therefore should not be given such places of prominence on a laboratory board. They also believe that, at least in their regions, chiefs are so busy with state responsibilities they would not be able to arrange time to participate in board meetings. Other concerns included the fact that chief state school officers are often "short termers." There was one suggestion that chief state school officers be invited to participate and then wait and see if they really become interested in the work of the laboratory. None of the other laboratories has been successful in making arrangements for chief state school officers to meet together as part of a regular board meeting, though at least one has tried to convene the chiefs on other occasions. The reason why the chief state school officer in one state does not serve is an apparent conflict of interest should that state contract with the laboratory for a piece of work.

In terms of representation on the board as spelled out in the bylaws, at least one laboratory that serves split states strongly believes that laboratories being shaped in new regions should serve entire states only because of the confusion which arises when trying to determine state representation.

At least two laboratories have moved outside their region when appointing board members. In one lab the individuals had been strong board members while working as educational leaders in the region, but when they moved out of the region, the board asked them to remain as directors.

There was a general feeling that a balance between educators and noneducators is desirable. However, some respondents believe the chairperson should be an educator if at all possible.

Regarding the rules governing state membership, there was one suggestion that once a state has decided to become a part of the region, divorce later on should be very hard to consummate. In other words, a state should not be allowed to pull out of a laboratory's governance system very easily.

The other labs choose various ways to conduct the business of their board of directors. In one case the board meets annually; in other cases the board meets at least three or four times a year. Most boards elect an executive committee that meets more often except for the 15-member board that handles business as a total group. In one case board members are paid $50 per meeting whether it is a full board meeting or program committee meeting. In this laboratory's case, however, there are 38 board members which adds up to a considerable amount should the entire board meet more frequently. One director suggested that provisions be made to pay board members that would lose salary or wages if they were to serve on the board. In other words, if board membership is a barrier to someone's service, a stipend should be allowed.

Several respondents believed that the board of directors should hold meetings in various locations around the region. Several laboratories move meetings regularly, in fact. Furthermore, some expressed concern that board meetings need to have considerable more depth to them so that board members become actively involved not only in policy making but in understanding what R&D is and could be, involved in important issues--such as setting goals and questioning assumptions--and less on housekeeping matters. Indeed, one board chairperson believes that in order for the board to be truly responsive, board members need inservice training in how to become good board members for an R&D organization. Said one director, board members have to see their responsibilities as more than just attending meetings.

One board chairperson believes that because many board members have influential contacts in the state, across the region and at the national level, they should be used to the hilt much more effectively than they are today.

Several respondents from the other laboratories believe that a board-appointed panel of consultants to conduct an occasional external review of the laboratory's operation is useful. One calls its 10-member group a Council of Advisors with freedom to "look at anything," but particularly needs sensing and long-range planning.

A common concern expressed by the seven other laboratories relates again to the effect of federal behavior on board behavior. One laboratory provided an example of this impact by noting that the timeline for NIE three- to five-year program planning initiated in late 1976 and early 1977 almost made it prohibitive for the board to become involved meaningfully in the process of priority setting.

Choose Director

Where will the buck stop?

Finding the person who can manage the many facets of a regional educational laboratory requires great care in specifying criteria for the position: Will national reputation in an identified discipline be helpful? Will regional name recognition and respect be useful? Will experience in R&D be required? The mark of success is not unlike that needed by any chief executive of a large enterprise: an ability to work closely and effectively with people whether they are governing board members, constituents, clients, or staff.

The person you need is not somebody looking for the job; you have to look for them.

--Laboratory board member

The director of the laboratory is the laboratory to many people. It should be someone who is comfortable in the field as well as in the research community.

--State agency administrator

ONE LABORATORY'S APPROACH

For many months, early planners at NWREL pondered the issue of the kind of individual who should serve as director. Criteria were drawn by a subcommittee, national recruitment was mounted, and a number of likely candidates were screened. Some persons felt the director of the new R&D institution should be someone with a national reputation in public education. Indeed, two or three individuals with those credentials were recommended for final interviews. One--a national officer of the American Association of School Administrators--at first accepted the offer, then turned it down 24 hours later.

As the time drew nearer for the laboratory doors to open, however, several regional candidates were seriously considered and consensus was that someone with firsthand knowledge and experience of school problems in the Northwest might be better after all. Finally, the interim board settled on one of its own: Lawrence D. Fish, who had been involved from the earliest planning phase and was then on loan from the University of Oregon's College of Education as a full-time interim staff member at the temporary lab offices in Portland.

In Larry Fish, the interim board had chosen an individual with broad experience as a teacher and principal and curriculum coordinator in various rural communities in Oklahoma, California, and Idaho. With that background, he moved to the Idaho State Department of Education with responsibilities for curriculum development at the state level. Leaving Idaho, he moved to Oregon to become assistant superintendent for curriculum and later superintendent of a major suburban school district. Following this stage of his professional career, he moved to Oregon College of Education as director of a Ford Foundation-sponsored effort to improve teacher education practices as part of a statewide R&D consortium known as the Oregon Program. He was subsequently appointed associate professor of education at the University of Oregon and director of the university's Bureau of Educational Research for the two years prior to becoming NWREL's first and only chief executive.

One way to assess how a person views R&D is to read publications listed on a vita. Two articles written by NWREL's executive director before he was selected to fill the top job reveal an underlying philosophy that was to guide the laboratory during its first ten-year period: "Classroom Teachers are Curriculum Builders" in the Idaho Education Association Journal, September, 1954, and "Curriculum Development Involves People," in Educational Leadership, October, 1966.

More than credentials and publications make a laboratory director, however. While criteria like national or regional reputation, public school experience or research experience in higher education can consume a selection committee's time, the qualifications that really count are the ability to administer a multimillion dollar enterprise:

1. Experience in management of programs and people.

2. Understanding of what the school business is about from the local level on up.

3. Understanding of educational research and development across all its dimensions: basic and applied research, the development process, dissemination, and service.

4. Understanding of local, state and federal relationships: how Washington, D.C., works; how state and local governments work.

5. Ability to work with a large and strong board of directors and keep policy matters separate from management issues.

6. Sensitivity to the needs of various special interest groups, but not bowing to every demand.

7. High tolerance for travel on airplanes and living out of a suitcase.

The qualities that have characterized NWREL's executive director tend to cluster as follows:

1. Knowing how far to push--but also knowing when to hold back and compromise.

2. Ability to hold firm--but also work through personal relationships in a sincere fashion.

3. Ability to deal with people fairly and above board.

4. Faith in educational agencies and their potential.

5. A belief that commitments are commitments--whether formal or not.

To understand how these attributes and abilities become operational is to examine one typical day in the life of a laboratory director. The following examples illustrate the range of relationships and interactions required of NWREL's director:

External Telephone Calls

1. Telephone conversations with two NIE associate directors discussing long-range plans for the Institute and specific strengths NWREL offers in their program area.

2. Conversation with one of the chief state school officers in the region about a possible cooperative venture.

3. Conversation with U.S. Office of Education regional commissioner offering laboratory's facilities for a meeting on new federal program guidelines.

4. Call from chairperson of a local school district's Superintendent Search Committee asking for names of possible candidates.

5. Oversees telephone call from Australia Education Minister regarding upcoming conference of Pacific Rim nations on common educational needs.

6. Telephone call to a lab board member answering her question about a completed laboratory project.

External Correspondence Received (and Response)

1. Preliminary GAO audit report (referred to associate director for cabinet discussion).

2. Two letters of appreciation from clients where work was recently completed by NWREL staff (referred to appropriate division director with "well done" notation).

3. Notices from two separate state administrative organizations setting date for next statewide conferences (noted on calendar).

4. Request from president of special education teachers' association seeking laboratory's participation in regional conference on special education for the handicapped (referred to project director with "go ahead").

5. Three letters from job applicants (referred to personnel office).

6. Two RFPs from Council for Educational Development and Research in Washington, D.C. (referred to Director of Resource Development).

7. Review of daily education newsletters received at the laboratory.

8. Review of state school board association newsletter from a member state.

9. Review of state education association newspaper from another state.

Memos (and Response)

1. Recommendation from marketing department for displays at upcoming national conventions ("OK").

2. Recommendation from lab committee on staff development activities ("needs more cost analysis").

3. Recommendations from project director on regional pilot sites for her program ("why none in Idaho and Washington?").

4. Three memos from personnel office regarding new hires (approval).

5. Two memos from project directors regarding salary adjustments for their staff (approval).

6. One form requesting termination of a staff employee (approval).

7. Summary memo on affirmative action results for the previous quarter (referral to cabinet).

8. Memo from project director with sample copies of two prototype products now ready for field testing (notation on drafts, "keep up the good work").

9. Information copy of a final evaluation report for a completed contract (notation on draft, "didn't read all, but couldn't spot your suggested alternative solutions for school board to consider").

Executive Meetings

1. Three separate, short meetings with the associate director of the laboratory:

   - Review of recommendations from a Division Council to be discussed at late morning executive cabinet meeting.
   - Review of program/project advisory committee work.
   - Implications of the GAO audit report preliminary findings.
   - Staff request for new fringe benefit package covering preventive dental care.
   - Problems reported from project directors on recruiting qualified minorities and women for coordinator responsibilities.

2. Attendance at monthly executive cabinet meeting chaired by associate director and including four division directors and top administrative staff.

Visitors

1. Discussion with project director on contract overruns.

2. Discussion with program director on critical letters received from one pilot workshop participant.

3. Discussion with visiting dean of college of education on possible cooperative venture in a summer workshop.

4. Short discussion with five teachers visiting the laboratory from a nearby education service district studying inservice needs for their county.

5. Visit with program monitor from NIE on a site visit to the laboratory.

Planning

1. Discuss travel arrangements to the Washington Association of School Administrators convention and Alaska field test site visits.

2. Dictate letter of appreciation to participants in a board subcommittee meeting discussing long-range program plans for the laboratory.

3. Letter to three superintendents congratulating them on passing difficult tax levies.

HOW REGIONAL STAKEHOLDERS FEEL ABOUT "CHOOSING DIRECTOR"

The 47 respondents in the regional survey would apparently change the aforementioned criteria very little should a new laboratory seek their advice on the choice of a director:

1. Look for someone with a knowledge of the region.

2. Public school experience is desirable but not necessary. National reputation is also desirable, but again not necessary.

3. Ability to manage a program as large as the laboratory is critical. That ability or skill should have been demonstrated in various ways. Use of a team approach to management is desired.

4. Qualities like the following should somehow be judged by the selection committee: openness, credibility, sensitivity to morale problems and enthusiasm.

5. Ability to communicate with a wide variety of groups.

One respondent wondered if, as a laboratory grows from the planning stage to maturity, it may require a different leadership at different life stages.

Overall, however, the respondents believe that candidates for a laboratory directorship must be ready to learn on the job and bring a commitment to the purposes of educational R&D and an ability to help others make the process work.

HOW OTHER LABORATORIES REGARD "CHOOSING DIRECTOR"

Respondents from the other laboratories, themselves directors or top decision makers in each institution, do not believe that reputation in the region is an adequate criterion to use in selecting a director. However, they do not rule out regional reputation and experience in public schools as desirable factors. Nor do they rule out national reputation as a person who has made a name in R&D as a factor in selection. However, one director noted if all things are equal, he would prefer not having a researcher in the top position because of the unique ties a regional laboratory must make with practitioners. The best combination is still someone who can look at education knowledgeably from a variety of perspectives.

Respondents from the other laboratories do agree that an ability to administer a complex organization is the attribute most needed for a regional laboratory director. Technical competence in R&D will come with experience, but management is something that cannot wait for the lessons of experience. Other qualities they see as important include:

- An understanding of Congressional and federal relationships and an ability to move easily within these channels.

- An ability to identify good program and project managers who can make things happen within the organization.

- An ability to look into the future--to have a vision of what education can and will be in the years ahead.

- An ability to balance a number of skills, to work enthusiastically in the building and shaping of a regional institution, to "put it all together."

When asked if regional laboratory directors should be chosen for their probability of staying on the job, the answer was a definite "no" despite the fact that four out of eight of the present laboratory directors have been involved with their institution from the very beginning.

Select Staff

Who will want to take these risks?

Staff in a regional laboratory ideally represent a variety of disciplines and technical skills. Yet, the persons who do educational R&D are not easily found. On-the-job training has been used to good advantage in helping staff cope with the ambiguities, tight deadlines and "delayed gratification" that typify most laboratory work. Staff in regional laboratories include women and minorities in positions that directly shape the content and functions of R&D work.

The single most impressive thing about our laboratory is the highly competent staff it has assembled.

--Professor of education

Staff of a regional laboratory should move among the region's institutions--perhaps by rotating assignments--so they never lose sight of the problems faced by professionals in the field.

--Superintendent of a large metropolitan district

ONE LABORATORY'S APPROACH

With Portland designated as the site for the laboratory's headquarters and a director selected from Oregon, too, interest in mid-1966 was naturally focused on who would staff the laboratory, where they would come from, and whether one or two states would "control the show." As it turned out, the 22 members on the first year's staff in 1966 included persons from each member state in the region and several other parts of the country as well. It was also soon apparent that the lab's board of directors would provide the kind of balance people wanted--further strengthened by the widespread involvement of practitioners in advisory roles and as collaborators. Even today, additions to the 150-member staff are recruited both from the Northwest and across the nation. As the laboratory has grown over the years, staffing has become diverse in terms of technical training and educational heritage (see page 112).

Recruitment and Selection

Staffing a regional laboratory demands careful recruitment and selection of individuals with the right mix of talents. It is difficult to pinpoint why some persons find a great deal of career satisfaction doing educational R&D work at NWREL and why others are less successful. Some likely reasons follow:

1. Why You Will be Successful at NWREL

   - You are highly skilled and good in one or more fields: research, evaluation, design, writing, training, etc.
   - You have a high energy level and are comfortable working under pressure and at a fast pace. You are able to put in long hours if necessary to meet deadlines and are not bound by a time clock.
   - You understand the school business; that is, you know how educational institutions are organized and have firsthand knowledge of what people in those institutions are thinking.
   - You are able to track down information you need to accomplish some task without having to be told to find it. You know how to go to the right source at the right time.
   - You are able to articulate a problem and its parameters. Even better, you can describe it on paper.
   - You are aggressive yet not pushy. You know how far to go to accomplish a task without offending anyone.

Institution	Doctorate	Masters	Field of Study
Boston College		1	English
Brigham Young University	1		Instructional Psychology
Bucknell University		1	Educational Research
California State University		1	Social Sciences
Case Western Reserve University		1	Speech Communication
Fordham University		1	Mathematics and Philosophy
George Peabody College		1	School Administration/ Political Science
Harvard University	1	1	Educational Administration Science/Biology
Illinois State University		2	Education/Social Sciences Psychology
Indiana University	1	1	Music (2)
Johns Hopkins University		1	Urban Education
Michigan State University	1	1	Research Design, Measurement and Evaluation (2)
New Mexico State University	1		Educational Administration and Research
Ohio State University	3	3	Educational Evaluation Educational Research Educational Research and Psychology Mathematics Education Educational Administration Educational Development
Oregon College of Education		1	Education of the Socially and Culturally Disadvantaged
Oregon State University		4	Guidance and Counseling (2) Statistics Secondary Education Counseling
Portland State University		1	Teaching
Purdue University		1	Educational Research
Reed College		1	English
San Diego State College		1	Experimental Psychology
Springfield College		1	Elementary Curriculum
Stanford University	2	2	Curriculum/ Administration Educational Administration, Planning and Systems Design Business Administration Curriculum Development
University of California	1		Education
UCLA		2	Spanish American Literature Secondary Education
University of Chicago	2		Measurement, Evaluation and Statistical Analysis (2)
University of Colorado	1	1	Educational Research and Evaluation (2)
University of Hawaii	1	1	Educational Psychology (2)
University of Illinois	1	1	Educational Psychology Adult Education
University of Iowa	2	1	Educational Psychology/ Instructional Systems Design Educational Administration News-Editorial Journalism
University of Michigan	2	3	Social Psychology Adult Education/ Sociology Administration Psychology Guidance and Counseling
University of Minnesota		1	English
University of New Hampshire		1	Education
University of New Mexico	2	2	Counseling Psychology/ Pupil Personnel Services Education Foundations (2) Guidance and Counseling
University of Northern Colorado		1	Science Education
University of Oregon	5	9	Administration Curriculum and Instruction (2) Educational Administration (2) Curriculum Education/Social Psychology Art Education Research Marketing Librarianship Library Science School Counseling Comparative Literature
University of Pennsylvania	1	1	Educational Psychology Systems Engineering
University of Portland		1	Management
University of Southern California	1	1	Political Science International Relations
University of Texas	1		Educational Psychology
University of Utah	1	2	Counseling-Industrial/ Organizational Psychology Industrial Psychology Mathematics Education
University of Washington		3	Anthropology Education Educational Psychology
Washington State University	3	2	Curriculum, Education/ Sociology Educational Psychology School Administration Adult and Continuing Education Educational Administration
Washington University	1	1	Educational Administration Health, Physical Education and Recreation
Western Washington State College		1	Psychology

- You have a sense of humor. You are able to accept illogical circumstances in a work environment that is influenced by political decisions, bureaucratic actions, and different fiscal years in dozens of different agencies.

- You are able to write almost any kind of material for almost any kind of audience. Proposals, interim reports, and final reports are your stock in trade.

- You are able to plan and manage several tasks at once. You can move easily from one assignment to another.

- You have a desire to stay informed and are able to talk knowledgeably about a number of educational trends and issues. You keep up on what's happening regionally and nationally in education.

- You are able to communicate orally: sometimes in small groups--sometimes before large groups. You are quick on your feet and able to use plain talk instead of research jargon if necessary.

- You believe in research and development as a worthwhile endeavor that has payoff in terms of improved educational practices. You can pick out the best options from a variety of alternative R&D strategies.

- You like to travel.

2. <u>What Causes Difficulty for Others</u>

- A lack of tact.

- A lack of faith and trust in school people.

- A lack of warmth in interpersonal relationships that helps others feel at ease.

- A lack of understanding about how educational institutions work.

- A need for large doses of overt praise for a job well done.

- A lack of experience in coping with ambiguity.

- A lack of ability to plan time and set a pace that will meet deadlines.

- A feeling of smug self-confidence in your own abilities.

- A tendency to listen too little and talk too much.

- An unwillingness to work as a team member--to negotiate your ideas with those of others.

While these qualities are not often put into job announcements, they do affect the kind of work that staff are able to perform and the products that emerge from their work. Since all staff fall short on some criteria, a regional laboratory must also include within its organizational framework a strong staff development component.

R&D Management

As regional laboratories have proven themselves in the past ten years, they have also spawned a new kind of career: the R&D program or project manager. This type of individual demonstrates certain characteristics that are not easily found just anywhere in the education business. In addition to the qualities for staff members mentioned above, the successful R&D manager must score particularly high on some other competencies:

1. A knowledge of federal relationships and how to deal with project officers in a variety of funding agencies. This often requires skills like patience, persistence, and some firmness occasionally. It means knowing that while the funding agency needs you, you also need them.

2. A good working understanding of the research and development process as it has been evolving in the field of education.

3. An ability to use the resources of the laboratory to their fullest. This includes access to the informal network and how it works as well as the formal structure with its various service components.

4. Strong administrative ability, not necessarily content matter expertise. Many, perhaps most, R&D managers are not considered to be authorities in one field but are good organizers of a team effort where specialties can be drawn out or hired from the outside if necessary. Management is difficult in an R&D enterprise where staff are often hired on a tenuous basis recognizing that their job may disappear in a few short months when a contract ends. For these reasons, program and project managers must be able to do the following:

   - Draw out the strengths of each person on the staff.

   - Build functional teams that work together in problem-solving mode.

- Foster the kind of morale which enables all persons to contribute effectively.
- Administer frequent doses of praise for jobs well done.
- Chastise poor performance and improve skills that are weak.
- Watch for pressure points that need to be relieved by adjusting work tasks and priorities if possible.
- Keep a sharp eye out internally for those who have potential as R&D staff and administrators, particularly women and minorities.
- Balance consensus in staff decision making with decisiveness in terms of management responsibility.

NWREL Staffing Pattern

The total laboratory staff at NWREL varies as contract work is completed or new contracts are received. As of March 1, 1977, the full-time staff totaled 150 including 91 professional and staff and 59 support staff. Advance degrees held by staff members, institutions granting them, and fields of study are indicated on page 112. Their varied backgrounds and fields of study reflect the laboratory's diverse research, development and service competencies. The laboratory's commitment to equal employment opportunity principles is reflected in several ways:

1. A strong affirmative action plan.
2. A staff development plan which has affirmative action and equal educational opportunity as a primary goal.
3. Inclusion of a program for participation of women and minorities in its current five-year planning with the National Institute of Education.

Composition of the 150-member staff as of February 28, 1977, was:

	Women	Men	Spanish Surname	Native American	Asian	Black
Exempt	34	57	4	5	2	2
Nonexempt	54	5	1	4	3	4

In addition, a large number of faculty and staff members from NWREL member institutions and other educational institutions work as consultants and part-time staff members. At any one time, more than 50 people from other institutions are likely to be working on specific tasks. Their special

relationship with the laboratory may range from a few days as a consultant to an extended period of time on leave from their regular institution. Such arrangements make it possible for the laboratory to tap specialized capabilities of a large pool of educators in the region and, at the same time, increasing field involvement in program planning and implementation. Thus, an important characteristic of the laboratory's staff is a demonstrated ability to adjust to changing regional needs and new national priorities.

Staffing Classifications

The following are personnel classifications and the number of persons in each category as of September 30, 1976:

Classification	Number Employed
Non-Exempt	
Office and Clerical	
Clerk	1
Typist	1
Steno	3
Secretary	22
Administrative Secretary	10
Executive Secretary	9
Technical	
Technical Assistant	2
Technical Specialist II	7
Technical Specialist I	0
Exempt	
Professional	
Assistant	12
Specialist II	12
Specialist I	25
Associate	13
Senior Associate	15
Administrative	
Support Unit Director	7
Project Director	11
Program Director	4
Executive	
Division Director	4
Executive Director	1
Associate Director	1

"Job worth criteria" are used when establishing the above classifications or reclassifying individuals for new positions at NWREL:

1. Relationships with people. The relative exposure of the position to outside contacts (public) and inside contacts (other employees) and the kinds of response or action required of the employee in these contacts.

2. Supervision over others. The kind and degree of control over the work of other employees required in the position, including the occupational variety, level and number of positions supervised.

3. Responsibility, accountability or consequence of error. The extent to which the job requires the employee to make decisions or take actions which have an impact on people's lives, well being, agency cost or reputation. The significance of the action is limited by the amount of supervision and guidelines provided and the degree of finality of the employee's decision.

4. Analytical ability, originality or problem solving required. The kind and degree of originality or creativeness required in the job to plan, make analyses, solve problems and develop new ways of doing things.

5. Knowledge and skills required. The amount of job information and the level and variety of skills required to perform all aspects of the job effectively.

6. Working conditions. Recognition of effort required or other elements that do not fit under one of the above factors.

HOW REGIONAL STAKEHOLDERS FEEL ABOUT "SELECTING STAFF"

Staff competence is the one ingredient most frequently cited by Northwest respondents as the mark of NWREL's success. What they like about NWREL staff includes:

- Ability to understand practical school problems.
- Ability to get people involved in R&D.
- Willing to be evaluated on performance in their specialties.
- Ability to handle a variety of skills well.

- Ability to work at a high energy level.
- Ability to be "accepted" by constituents.
- Ability to work independently.
- Ability to spend time with people.
- Ability to adjust to change.

While the respondents apparently like the selection process used at NWREL, their advice to new laboratories staffing up for the first time would include:

- Rotating staff into the field regularly to avoid their becoming "professional researchers."
- Hire some people because of their specialties (in dreaming); others for their generalizable skills (in doing). Hire generalists as full-time staff and put the specialists on contracts as needed.
- Invest in keeping employees competent through a good staff development program.
- Develop key talent from within rather than always looking outside when recruiting.
- Make three- to five-year commitments to hold some top staff.
- Involve practitioners on a regular basis, particularly on short-term assignments.
- Look for people who are good in one field yet are able to understand people from other fields.
- Beware of "R&D types" who "talk down" to practitioners or who tend to be "far out" and dominate meetings.

HOW OTHER LABORATORIES REGARD "SELECTING STAFF"

Directors and board chairpersons of the seven other laboratories understand personnel-related problems or issues as well as anybody. While they admit that affirmative action and other policies have changed laboratory staffing approaches over the past few years, they did not hesitate to offer advice on how to assemble a capable staff of R&D workers.

- Try to build a team of people who offer a mix of skills: some will be "insiders" with certain technical competencies or specialties; others will concentrate on field contacts.

- Be less concerned about overall number count of minorities on the staff, but with whether minorities are involved in actual knowledge production and utilization where their views count.

- Recruit people you want, thinking twice about people who are just looking for work at the lab.

- Try to find people who want security, but not because they need it.

- Center your initial recruiting locally and regionally and chances are you'll find good people nearby.

- Keep a sharp eye out for persons who are dynamic and flexible, not entrenched and established.

- Public school experience is not as important as the ability to relate well with others.

Only one director mentioned problems in recruiting a quality R&D staff. His laboratory brought in about 80 percent of its personnel from outside the region. The impact has been positive though since the staff is composed primarily of individuals with "cosmopolitan" views who are not place-bound.

Some laboratories tend to look for generalists as program and project managers because "persons in substantive content areas--even though bright--are often hard to work with." Yet, as noted above, they know that a well-rounded lab staff must have technical people with the tools and skills to handle R&D as well as field-oriented persons who can work easily with practitioners on data gathering and product utilization. In the latter instances, a former school administrator who knows schools is just as much a specialist as an evaluator. There was some sentiment in favor of core laboratory staff being protected by long-term contract arrangements while retaining the flexibility to move project staff on and off assignments as needed. Some laboratories use "program associates" as 20 to 30 day full-time staff members on leave from other institutions. This is a particularly useful way to involve scholars.

To help staff derive more satisfaction from their work, prepare for other R&D assignments and sharpen their present skills, the other labs agree on the need for systematic staff development that provides professional and support persons alike with career flexibility. They believe a good staff development program should:

- Help program and project staff open up to new futures; never let them get too comfortable.

- Encourage staff to move into the field as an important way of keeping in touch.

- Emphasize interpersonal skills such as awareness, perceptivity, and listening: "one staff member on the wrong foot can destroy a lot of confidence in the lab's work."

One lab chairperson was concerned about morale problems that set in when staff know their "jobs are up" in two or three months and their attention gets diverted from ongoing tasks. One director cited continuity of core staff as one of the most important factors in his laboratory's success. Another lab manager agreed that a persistent problem is what to do about the staff "burn-outs" and those who become disillusioned or embittered about their work or its contribution.

Organize for Work

How can we achieve stability out of instability?

Most laboratories that remain active and well staffed in 1977 made an important decision early in their development: funding sources must be diversified. Coupled with periodic changes in federal policies and appropriations for R&D, this has seemed to be a wise move--partly because it keeps the organization flexible and constantly aware of new opportunities to serve. A balance of programs and projects cutting across a variety of subject domains enables a laboratory to move staff quickly as needs arise. Management in this kind of structure must be tough, yet open to the needs, concerns and involvement of staff in decision making and information-sharing.

Our laboratory is an improbable conglomerate, but it seems to work.

--Superintendent, suburban school district

A laboratory needs a critical mass of staff to deal with regional problems. Uncertainty of funding limits efforts.

--Chairperson, laboratory board

No other institution can do what a lab can do. Districts in a state are not together enough on needs nor can we agree what services our immediate unit should provide. The lab has greater flexibility and can move highly credible staff in and out of projects quickly.

--School district director of federal projects

ONE LABORATORY'S APPROACH

Description of Organizational Structure

A laboratory must be prepared to renew itself occasionally in response to everchanging regional and national needs and the ebb and flow of contracts. Organizations that perpetuate a particular structure or style may lose their competitive zeal and ability to perform. On the other hand, organizations that can shift staff to get work done better and faster will probably be asked to do more.

Unlike public institutions working within civil service or tenure rules, private firms like NWREL are free to build quickly on the strengths of staff. For that reason, division structures at NWREL are not sacred; new priorities always demand a different clustering of projects and staff. The organization of NWREL that existed in mid-1976 is illustrated on page 217. A year-by-year record of how the following functions were configured since since 1966 is found in the appendix.

FUNCTION	PRIMARY RESPONSIBILITIES
Board of Directors	Policy decisions, program priorities, selection of executive director and associate executive director, federal relations, state liaison.
Policy Division	
Executive Director	Board liaison, federal/state/local relations, overall management decisions for the laboratory.
Personnel Office	Staff recruitment, initial screening, administration of affirmative action and equal employment opportunity policies, staff orientation, coordination of staff development.
Institutional Communications Office	Coordination of external communications (e.g., membership newsletter), orientation for laboratory visitors, internal staff newsletter.
Planning and Management Division	
Associate Executive Director	Planning, resource development, marketing, quality control, monitoring of divisional programs, daily operational problems of the laboratory.

FUNCTION	PRIMARY RESPONSIBILITIES
Marketing and Dissemination Office	Product quality, copyright clearances, editorial support and production of certain laboratory published products, liaison with laboratory publishers, referral of inquiries regarding products and services.
Resource Development Office	Liaison with local, federal and state funding agencies; preparation of proposals for funds; monitoring of federal, state and local developments; long-range planning.
Program Analysis Office	Contract cost-progress control, documentation of completed work, projections of anticipated work.
Administrative Services Division	
Accounting Office	Budget, recordkeeping, payroll.
Facilities and Purchasing Office	Coordination of building needs, supplies, equipment inventories, mail service, telephone.
Library and Information Center	Coordination of print and nonprint materials both on library shelves and housed on laboratory staff shelves; access and utilization of information and data banks nationally.
Media Center	Design and reproduction of print and nonprint materials.
Computer Center	Support to program and projects requiring data processing (NWREL contracts with Bonneville Power Administration and others for these services).
Programmatic Divisions	R&D program divisions have been configured in various ways at NWREL, depending on the nature of present and projected work. At times, enough activity has been generated in the same or similar area--say career education or reading and language development--to justify an entire division with several programs and projects within it. At other times, a process focus--like strengthening educational institutions--might suggest a division that clusters similar change-oriented activities. As regional services, technical assistance and dissemination needs have grown in importance--

FUNCTION	PRIMARY RESPONSIBILITIES
	beyond the scope of regular R&D programs and projects--a divisional structure has also been useful to house those efforts.
Programmatic Division Director	Overall management advice and support for programs and project directors within the division; resource development; negotiations with clients.
R&D Programs	To be designated a "program" at NWREL, an activity may include one or more of the following characteristics: • A comprehensive plan of work involving most R&D functions in an interrelated fashion. • Work organized into specific activities and tasks. • Work is long-term or multiyear in nature (at least a two-year minimum expected life). • Work is supported rather substantially in funding. • Cost reimbursement contracts are usually preferred and are usually self-renewing.
R&D Projects	The other general type of activity with a division is a "project," having one or more of the following characteristics: • A unit of work that is discrete from any other laboratory program. • Stress is usually on one or two R&D functions only, usually with no effort to address a comprehensive problem. • A relatively short-term piece of work often less than two years in length. • Work typically addresses a particular need with a certain target group in mind. • Cost is usually, but not necessarily, a fixed price arrangement.

FUNCTION	PRIMARY RESPONSIBILITIES
Laboratory-wide Support Systems	
Executive Cabinet	The executive cabinet is composed of the executive director, associate director, division directors, and institutional communications director as a nonvoting member. The executive cabinet meets to advise the executive director on major activities to be undertaken or concerns generated from Division Councils.
Division Councils	Monthly meetings of program/project directors to discuss items to be reviewed by the cabinet and share information among colleagues.
Retreats	The executive cabinet and Division Councils are convened annually--often in a retreat setting--to review and discuss items of laboratory-wide concern.
Laboratory Staff Committees	Standing committees are regularly used to generate staff input on matters of laboratory-wide concern. Examples include a women's equity committee, a personnel committee, a program committee and a policy and procedures committee. Ad hoc or temporary committees are convened for planning activities such as the laboratory's annual Christmas party, etc.

Budgets for the above functions are two general types: those positions and functions that are funded out of General and Administrative ("overhead") funds and those where costs are directly generated from contracts and grants. All contracts are subject to a percentage overhead charge which supports the administrative support and policy functions for the organization. All costs with the exception of R&D Programs and R&D Projects above are funded from General and Administrative budgets.

In recent months, NWREL has sought and received federal approval for a variable overhead charge to reflect the differences in paperwork and negotiation required for large federal R&D programs requiring elaborate proposals, plans and reporting procedures as opposed to small service contracts which require little more than a few letters and phone calls to negotiate and administer the work. This is expected to increase the laboratory's effectiveness in meeting regional service requests.

A nonprofit institution like NWREL is allowed to accumulate an equity fund which is essential to the ongoing work of the laboratory and its future planning efforts. Equity funds are generated from several sources: (1) fees on certain federal contracts where a management fee is allowed, (2) any excess revenues from fixed price contracts, (3) one-half of royalties received from products generated from federal funds (the other half is returned to the federal treasury), (4) sales from any publications where the laboratory is the sole proprietor. Equity funds are spent in the following ways: (1) independent research and development activities, (2) to cover losses on any contracts, (3) to initiate new service functions not covered by existing contract (e.g., a regional services office and a marketing office until they can become self-sustaining), (4) to maintain a resource development capacity, (5) to cover any unanticipated charges required as a result of audits and (6) to underwrite the development of materials deemed worthy of dissemination where the contract has been closed and there is no logical way for the products to be disseminated.

Funding

NWREL tries to achieve a balance of incoming program and project funds along several dimensions.

1. Balance of Research, Development, Dissemination and Service Activities

   Four broad categories will characterize most of the laboratory's work, recognizing that at any one time a project or program may include some of each:

   - Research--Using basic and applied research to build a firm R&D foundation.
   - Development--Designing and testing major products (procedures, materials).
   - Dissemination--Helping users know there are answers available that are easy to install, often with the laboratory's help.
   - Service--Responding to appropriate (often smaller) requests using R&D technology.

   A typical pattern is to seek most resources in development but use that large base to maintain strong efforts in research, dissemination and service.

2. Balance of Funding Sources

   A laboratory must also look where its money comes from. NWREL has consistently tried to strike another kind of balance between

federal, state and local agencies. The charts on the pages that follow illustrate how this pattern has occurred since 1966 when one basic federal contract sustained all laboratories.

Looking ahead at the distribution of balance between laboratory efforts and resources for the next five years, the following illustration is used in NWREL's 1977 mission statement:

DISTRIBUTION OF BALANCE OF
LABORATORY EFFORTS AND RESOURCES

	During FY 77		Goal for FY 82	
	Federal Resources	State-Local Resources	Federal Resources	State-Local Resources
Research and Development	63.1%	7.8%	35.0%	15.0%
Services	7.2%	21.9%	15.0%	35.0%

3. Balance of National, National/Regional, Regional/National, and Regional Emphases

NWREL strives to balance the focus of its work so that not all is directed toward any particular priority or final "destination." The following definitions guide planning:

- National--Programs/projects where the impetus came from the national level. The initiative lies primarily with the funding agency which is offering the work in specific target areas. Both regional and national R&D resources can be used and the laboratory must decide if it has the internal capacity and the field linkages both regionally and nationally to accomplish the work.

- National/Regional--Programs/projects which are national priorities but also reflect regional needs. These contracts may have their initial impetus from the federal level, but they are uniquely suited for R&D using regional resources and dissemination strategies.

- Regional/National--Regional needs and priorities are lifted up as those which are likely shared by a national audience as well. Funding agency agrees and enables a regional R&D effort to proceed. Plans for eventual spread throughout the country are prepared.

LABORATORY CONTRACTS NEGOTIATED BY YEAR: 1966-1976

YEAR	FEDERAL	TERRITORY/STATE	INTERMEDIATE UNITS	LOCAL SCHOOL DISTRICTS	COLLEGES/UNIVERSITIES	EDUCATIONAL SUPPORT ORGANIZATIONS *	OTHERS **	TOTALS
1966	1							1
1967	2							2
1968	6	1						7
1969	4	16						20
1970	4	13	2	3	12	1	2	37
1971	17	25	1	28	7	5	4	87
1972	18	17	2	26	7	3	3	76
1973	16	24	8	20	6	5	2	81
1974	18	35	1	45	13	3	6	121
1975	24	25	9	38	9	6	8	119
1976	16	36	15	53	19	12	6	157

* *For example: professional associations, other regional educational organizations and R&D performers.*

** *For example: local government agencies, religious and other community organizations.*

Shaded area represents federal sources; remainder is state and local.

NWREL FUNDING
(By Fiscal Year)

LABORATORY RESOURCES

September 1, 1975, to August 31, 1976

NWREL Income by Programs/Projects	Amount	Percent
Rural Education	$ 962,320	17.8
Experience-Based Career Education	850,551	15.7
Teaching Competencies	668,877	12.4
Oregon Competencies	556,847	10.3
Indian Reading/Language	433,957	8.0
Assessment	424,975	7.9
Bilingual Education	378,213	6.9
Experimental Schools Evaluation	322,015	5.9
Evaluation and Audit	245,729	4.5
Educational Services and Other Projects	131,242	2.4
Adult Education	95,939	1.8
Miscellaneous Revenues	79,359	1.5
Samoa Education	79,259	1.5
Project PLANIT	67,863	1.3
Computer Technology	60,896	1.1
Manpower Training	55,916	1.0
	$5,413,958	100.0

NWREL Income by Source		
National Institute of Education	$3,682,394	68.0
State/Territorial Education Agencies	666,988	12.3
Office of Education	409,185	7.6
School Districts	265,622	4.9
Business and Other	210,875	3.9
College/Universities	94,970	1.8
Other Federal Agencies	83,924	1.5
	$5,413,958	100.0

AMOUNT, TYPE AND SOURCE OF LABORATORY CONTRACTS

NEGOTIATED DURING SECOND QUARTER, FY77

(December, January, February)

	TYPE				SOURCE						STATE, REGIONAL OR NATIONAL LOCUS									
AMOUNT	CONTINUING	NEW	*LARGE R&D PROGRAMS	**SINGLE FOCUS	SCHOOL DISTRICT	INTERMEDIATE AGENCY	STATE AGENCY	HIGHER ED AGENCY	FEDERAL AGENCY	OTHER	ALASKA	HAWAII	IDAHO	MONTANA	OREGON	WASHINGTON	NORTHWEST REGION	OUT-OF-REGION	***NATIONAL
$482,000	•		•						•								•		•
200,000	•		•						•						•		•		•
117,557		•		•			•				•								
53,443	•		•						•										•
28,385		•		•			•						•						
20,708		•	•		•					•									
19,450		•		•			•												
17,661		•		•	•													•	
8,492		•		•	•													•	
8,482		•		•	•													•	
7,000		•		•		•										•			
5,000		•		•					•	•									
5,000		•		•		•									•				
4,753		•		•	•													•	
4,349	•			•	•					•									
4,203		•		•	•													•	
4,112		•		•			•			•									
3,958		•		•		•												•	
3,722		•		•		•												•	
3,400	•			•	•					•									
2,856		•		•	•										•				
2,804		•		•				•							•				
2,740		•		•	•								•						
2,700		•		•	•										•				
2,500		•		•						•							•		

* Includes modifications to long-term programmatic R&D programs.
** Projects, training and technical assistance activities.
*** Programs with nationwide implications but regional involvement.

AMOUNT	TYPE						SOURCE							STATE, REGIONAL OR NATIONAL LOCUS							
	CONTINUING	NEW	*LARGE R&D PROGRAMS	**SINGLE FOCUS	SCHOOL DISTRICT	INTERMEDIATE AGENCY	STATE AGENCY	HIGHER ED AGENCY	FEDERAL AGENCY	OTHER	ALASKA	HAWAII	IDAHO	MONTANA	OREGON	WASHINGTON	NORTHWEST REGION	OUT-OF-REGION	***NATIONAL
2,275		•		•			•					•								
2,200		•		•	•														•	
1,900		•		•						•				•						
1,491		•		•	•														•	
1,041		•		•				•											•	
795		•		•				•							•					
494		•		•	•														•	
462		•		•	•														•	
400		•		•			•					•								
353		•		•						•									•	
279		•		•	•						•									
267		•		•				•				•								
145		•		•						•					•					
72		•		•	•										•					
$1,028,467	5	34	4	35	17	4	6	4	3	5	6	1	3	1	9	1	3	13	3	

Mean $25,711

Median 3,400

Range of Activity

$482,000 -- Continuation of Rural Education Program evaluation, dissemination and installation

$ 72 -- Saturday morning presentation on classroom discipline to 30 teachers and 3 board members, sponsored by local school district teachers association in small Oregon school district

NEW CONTRACTS NEGOTIATED SECOND QUARTER FY 77

R&D Focus Key

1. Problem Clarification
2. Research
3. Development
4. Evaluation
5. Dissemination Services
6. Implementation Services
7. General R&D Service Assistance
8. Marketing

R&D FOCUS	TITLE	PURPOSE	SOURCE
	RURAL EDUCATION PROGRAM		
2,3,4, 5,6	Basic Program Plan	Continue evaluation, dissemination and installation	National Institute of Education
6,7	Rural Education Workshops	Conduct training in the Rural Futures Development Strategy	Educational Service District 101, Spokane, Washington
		Conduct a one-day workshop in Ellensburg, Washington, for Rural Ministry Resources	University of Idaho
	IMPROVING TEACHING COMPETENCIES PROGRAM		
6	Group Process Workshop	Conduct PETC-I training at Fort Walton Beach	Okaloosa County (Florida) Teacher Center
6	Conflict and Negotiation Workshop	Conduct training at Rockville, Maryland	Montgomery County (Maryland) School District
6	Interpersonal Communications Workshop	Conduct a one-day workshop at Reno, Nevada	Mountain States Association of Community Colleges, North Idaho College

R&D FOCUS	TITLE	PURPOSE	SOURCE
	CAREER EDUCATION PROGRAM		
6	Experience-Based Career Education	Provide training assistance and materials for installation of the EBCE model	Jefferson County (Colorado) School District Education Service Center, Region 20, San Antonio, Texas Prince William County Schools, Manassas, Virginia Watertown School District, South Dakota Wayne Westland Community Schools, Wayne, Michigan Pocatello School District (Idaho) Philadelphia (Pennsylvania) School District Western Nevada Community College Illinois State Department of Education
4		Provide evaluation assistance for EBCE installation	Center for Education and Management, Greeley, Colorado
	OREGON COMPETENCIES PROGRAM		
2,3,4, 5	Basic Program Plan	Continue research and development work underway	National Institute of Education

R&D FOCUS	TITLE	PURPOSE	SOURCE
	AUDIT AND EVALUATION PROGRAM		
1,4	Emotionally Handicapped Program	Provide evaluation assistance to the program in Area II schools	Portland School District (Oregon)
1,4	Oral Language and Reading Development Program	Evaluate the Title I program	Anchorage School District (Alaska)
1,4	Oregon Teacher Intern Program	Evaluate the Indian Education Act program	Oregon State University
1	CINA Project	Provide planning assistance to the association staff	Cook Inlet Native Association, Anchorage, Alaska
1,4	Technical Assistance Project	Review documents and prepare recommendations	Vancouver School Board, Canada
1,4	Asian Bilingual Education Project	Evaluate the project	Portland School District (Oregon)
	ASSESSMENT PROGRAM		
1,4,7	Hawaii Title I Program	Provide statewide evaluation plan	Hawaii Department of Education
7	META Evaluation Workshop	Conduct three training workshops	Hawaii Department of Education
7	Competency Based Education	Provide assistance in assessment and testing	Hawaii Department of Education
1	Reading Assessment	Assist in design of assessment procedures	Idaho State Department of Education
	PROJECT PLANIT		
2	Continuation Contract	Expand research activities in PLANIT computer language	U.S. Army Research Institute

R&D FOCUS	TITLE	PURPOSE	SOURCE
	EDUCATIONAL SERVICES DIVISION		
7	Curriculum Development Workshop	Conduct five-day workshop for Regional Resource Center and 25 school districts	Alaska Center for Staff Development and Alaska Department of Education
1,6,7	Objective-Based Curriculum Project	Provide assistance and training in developing K-12 curriculum	Galena School District (Alaska) Adak Regional School District (Alaska)
1,7	Field Services Project	Provide training and planning assistance	Portland Development Commission
7	Vocational Education Study	Compare benefits of secondary and postsecondary training	Montana State Superintendent of Public Instruction
7	Consultant Services	Provide planning consultation	Nero and Associates, Portland Linn County School District, Mill City, Oregon Northwest Learning Resources System University of Oregon
7	Publications Project	Product teacher and student handbooks	North Slope Borough School District, Barrow, Alaska
7	Curriculum Development Policy Project	Assist in arranging regional meeting to secure input for NIE	Pacific Consultants, Berkeley, California
7	Leadership Skills Workshop	Conduct workshop for the Allied Health Center	University of Georgia
7	Administrative Arrangement Study	Conduct study to determine effective administrative arrangement for 7th, 8th and 9th grades	Pendleton (Oregon) School District

NWREL'S REGIONAL WORK IN NATIONAL PRIORITIES

TYPES OF REGIONAL RELATIONSHIPS

NIE'S PRIORITY AREA	NWREL PROGRAM	LOCAL DEVELOPERS	LOCAL USER REVIEW PANELS	FIELD TESTS AND REPLICATION SITES	FORMAL STATE AGENCY LIAISON	INSTITUTIONS OF HIGHER EDUCATION	PROGRAM POLICY OR ADVISORY BOARD
Basic Skills	Improving Teaching Competencies		•	•		•	
Educational Equity	Alaskan Readers		•	•	•		
	Center for Bilingual Education		•	•	•		•
	Guamanian Readers	•	•	•	•		
	Indian Reading and Language Developmnt	•	•	•	•		•
Education and Work	Experience-Based Career Education	•	•	•	•	•	•
Local Problem Solving	Rural Education		•	•	•		
Productivity	Oregon Competency Based Education	•	•	•	•	•	•

- Regional--Regional need and priority are strongly supported, justifying the use of outside funding (perhaps combined with state and local funds) to solve significant multistate problems. National spread is held in abeyance, but solutions to regional problems are often packageable for utilization by others.

4. Balance of Large, Mixed, and Small Activities

NWREL has consistently tried to maintain a balance between several, large, well-funded multiyear programs, some that are small and others that are mixed. Brief definitions of these types follow:

- Large programs are hedges against the ups and downs in funding and help maintain continuity of staffing and an essential knowledge and product base from which to build other R&D activities.

- Mixed programs and projects allow the laboratory to make best use of various staff talents by moving them in and out of long-term R&D work and short-term project or service-related work in the same or related content area.

- Smaller projects allow the laboratory to serve more people in the field and at the same time open new avenues for larger R&D problems that need attention.

5. Balance of New, Mixed, and Continuation Activities

NWREL also tries to maintain a certain amount of new work, some that is continuation of regular work and some that is mixed:

- New--Beginning with fresh, new programs and projects requires a heavy expenditure of energy unless the organization is large and experienced. Too many new starts cause strain on the organization.

- Mixed--If new, spinoff programs and projects can be intertwined with and built from existing efforts, the same staff may be able to work on both--allowing their strengths to be utilized to the maximum during transition periods between old and new work.

- Continuation--Mainline programs/projects provide a solid foundation for the entire laboratory, allowing persons to learn R&D processes as well as to become experienced in a specific content area. As a laboratory's reputation is built in an R&D area, expectations are established and users anticipate that products indeed will be available as promised. Shutting off the pipeline too soon does not make for solid field relationships.

Management Style: Creating a Climate for Effective Work

An organization like NWREL is accountable to many persons. Part of this responsibility is resolved through careful selection of the executive director and staff for the laboratory. Another consideration is continuous and appropriate staff involvement in decision making, interprogram communication and sharing.

One of the largest problems that staff in a regional laboratory face is finding personal rewards in a business where payoffs are hard to see and uncertainties are manifold. Communication, then, is one of the most critical issues a laboratory faces.

A real strength of a regional laboratory organization is its diverse mix of people brought in to work on programs and projects. It seldom takes very long for colleagial interests to grow. Yet without forethought, discontinuities and organizational breakdowns can occur.

For example, several programs and projects at the laboratory have been investing time and resources in research and development on "community participation" models--mostly aimed at how the schools can make better use of community input into educational planning and development (and, in the case of one program, extending as far as community participation in the teaching-learning process itself). Yet, seldom have staff working on the various models and strategies purposefully tried to find out what others are doing. Occasional staff "show and tell" sessions offer opportunities for staff to share what they are doing on their separate projects and program activities. Likewise, the laboratory's internal staff newsletter will often announce new projects or activities. A central spot for coordination of information flow has been, in fact, the laboratory's library or Information Center. As R&D specialists pursue their various tasks at one time or another, they will always cross at this particular service center in the laboratory. Another key spot where staff find out what programs and projects are doing is at the laboratory's Media Center where all printing is coordinated. Since the lab's coffee service is also located there, a common staff expression is "to find out what's happening, check at the Media Center." The informal communication network, then, often works better or faster than formal systems. There are, however, a variety of other ways that staff can keep in touch with the daily life of a large organization with activities dispersed not only throughout a large building but in the region and around the nation.

1. Occasional all-staff laboratory meetings are held where items of top concern to most people are explained by management, allowing ample opportunity for questions and discussion.

2. Division meetings are occasionally scheduled to encourage general and administrative staff or program and project staff to review and make input on items of general concern.

3. Staff interested in what will occur at quarterly NWREL board meetings are invited to attend an orientation session led by the executive director. The same information and handouts to be used with the board are discussed--allowing the staff to get a behind-the-scenes look at how policy decisions are made and the director a chance for a "dry run" before the board convenes later that week.

4. Program and project staff meetings are scheduled at the discretion of program and project directors. Larger programs may have management meetings as all-staff sessions while projects with two or three persons work closely together anyway.

5. Brown bag seminars at noontime are often held to discuss topics of mutual interest, see a new film, etc.

6. As in any large organization, there are places like the Media and Information Centers at NWREL, where people tend to cluster. During a lunch hour, for instance, it is not uncommon to find the laboratory's director playing cribbage with other staff members in the staff lounge area.

7. Social functions for laboratory staff are as important in a regional R&D organization as they are at any other work place. The laboratory sponsors at least three yearly: a golf tournament, a Christmas party, and a late summer salmon fishing trip which also includes the laboratory's board members.

HOW REGIONAL STAKEHOLDERS FEEL ABOUT "ORGANIZING FOR WORK"

The 47 respondents from the Northwest agree that flexibility is the cornerstone of a well-organized laboratory. Practitioners believe that in educational R&D--a field still relatively young--roles must be clearly identified and specified. For that reason, some respondents believe that a laboratory must have top-notch generalists as program and project directors rather than looking for specialists in content areas to head certain efforts. Several respondents believe that a participatory or consensus model for organization and management of a laboratory can be stretched too far when the organization does not have stable funding and must rely on demonstrated performance and field relationships. When it comes to matters of reorganization, however, at least a few respondents believe that staff continuity is important so that persons in the field grow accustomed to contacting a certain person for a particular problem. One noted, "you can pull up the plant so many times to see if it's growing that it dies."

Funding is a real concern for all 47 respondents. Perhaps they remember or have heard about the early 1965 promises for millions of dollars that would be distributed among laboratories and centers. All of them recognize that those dreams have long since evaporated. Still, the respondents believe there is considerable resilience in the present system. They note, for instance, that a laboratory could become too secure if it were entirely financed by one agency on a guaranteed basis. They appreciate the laboratory's competitive spirit and the fact that it continually looks for new sources of funds. Some wonder, however, if the laboratory should pursue nontraditional sources--for instance, private foundations. They always hope the laboratory will continue to meet their needs and they seem willing to pay the price to get the job done. Indeed, several respondents believe that some of the laboratory's most creative work has come from its short-term, service-oriented projects in the field.

A few respondents would like to see the laboratory have more federal discretionary funding without having to justify every step. In turn, they would like more explanations from the laboratory about the problems of funding and budgeting and how, for instance, the indirect charges (overhead rate) are computed and what these funds support. They believe that even though there might be better continuity for planning and staff with several large contracts, it could still be possible to maintain the organization with several dozen small contracts. They worry that the laboratory's emphasis on large contracts might cause the laboratory to ignore its service obligations to the field. They can see advantages for having several long-term projects and programs that do not need to be renegotiated each year; however, on the issue of management style, respondents have high praise for the laboratory's ability to respond to sometimes unreal demands. They see the laboratory as a place always occupied by optimists. They want the laboratory to continue to take risks, to challenge and to keep prodding the field to do the job of education better. They sometimes express concern, however, that staff tend to stay in the ivory tower too long without getting into the field to understand the problems of schools today. Some wish there were a way to rotate laboratory staff into the schools more often to see firsthand the problems facing teachers and students today. On the issue of interprogram overlap within the laboratory, some have observed what appears to them to be competition among projects and programs, each trying to "build another church" without checking first to see if someone else hasn't already made a good start in that area. Finally, while not disturbed by any previous product, some Northwest respondents believe that the laboratory should refuse funding if it's not possible to do a quality R&D job. This response apparently reflects a concern that federal agencies with money could again "wag the dog."

HOW OTHER LABORATORIES REGARD "ORGANIZING FOR WORK"

When it comes to structure, the laboratories examined in this study really vary little in design and format and approach to basic functions. Each relies on a board to set policy that guides management in carrying out R&D work. The laboratories are directed by persons with strong executive skills who have demonstrated their ability to assemble a top-notch staff with the skills and capabilities required for such work. Each follows an organizational set of checks and balances that seems to work in its own case. Most appear to follow a division structure which clusters programs and projects along common dimensions. The other approach is a matrix style that assigns functional responsibilities to specialty units so that cross-laboratory staff strengths can be brought to bear on the same problem. Some have tried modifications of each. In other words, there is no one organizational pattern that will fit another situation exactly. Each of the other labs--like NWREL--is constantly reexamining its mission, structure and procedures to fit present circumstances.

Laboratory directors and board chairpersons from the seven other laboratories did have a few observations to make, however, on basic organizational approaches. All agreed that accountability must be defined and distributed wisely so that all staff know who is responsible for what. One director prefers to see a spirit of competition pervade his organization, letting programs vie with one another for potential new work as long as they sustain regular contracts. Another laboratory looks at its overhead structure (the money generated for general and administrative purposes) as the way to sustain a top-notch staff that keeps a quality organization afloat. The flow of dollars, then, is a critical issue for all laboratories and for that reason each respondent placed heavy emphasis on the balance issues. Each laboratory defines its own approaches to "balance" in similar fashion, but basic facts boil down to this: a regional laboratory must have more than one large, sustained R&D effort at least a half million dollars in size (capable of maintaining a staff of at least ten R&D specialists) if it is to have any institutional viability at all and still provide a range of other R&D services.

The other laboratories agree that regional institutions need to develop one or more specialties as the base from which it can build expertise and a reputation. Indeed, each of the seven other laboratories has become identified or authorative in one or more target areas in its own right. This fact enhances its capability to offer a mix of services to a variety of clients. One director made very clear that his institution has not really launched any entirely new areas of work since the early days. A number of R&D activities have been spinoffs from mainline programs.

None of the other laboratory persons enjoys the "constant battle to keep our heads above water" and in fact resent the necessity to keep "running for survival." On the other hand, they do not believe that long-term funding, in itself, should be provided just to sustain R&D organizations.

"You can't make it on $10,000 contracts alone," noted one board chairperson. Maintaining a service capacity with many small contracts just does not seem feasible to the other lab respondents. The chairperson of another board in fact warned strongly that his laboratory is presently not structured to handle services of any extensive nature. Several respondents, in fact, said they would look closely at the integrity of their mission before jumping into a "job shop" mode of operation. Another believes strongly that programmatic R&D is a service in its own right without seeking work that falls outside particular areas of expertise.

Laboratory respondents have found it has been hard to convince federal officials of regional needs when trying to build an R&D base. One chairperson and director both noted that states cannot use their own funds to solve regional problems and therefore they are hopeful for continued funding patterns that give more leeway to the laboratory boards in defining R&D priorities. At least two board chairpersons are weary of federal "dictation" of program priorities. Yet, they are willing to work collaboratively with funding agencies to define how regional needs can complement national priorities. One laboratory director, in fact, has found considerable success in combining state and federal funds to solve problems on a regional base.

On the issue of management style and climate, laboratory directors all illustrate themselves what they mean when they talk of aggressive management because each in his own way has built a successful institution with the help of a large number of people. Communication is a tough problem in all situations, whether organized by a separate program structure or by a matrix of functions.

Their common advice would be this: a successful laboratory will demonstrate strong management capabilities and make few mistakes. Management must continually look for opportunities for new resources but most of all management must maintain solid, sound relationships with federal agencies since that apparently will be where most resources lie.

Build Constituency-III

Who should be involved in R&D?

A distinguishing characteristic of a regional laboratory is its ability to pull together diverse individuals, groups and agencies in pursuit of a common cause. This catalytic role for laboratories requires an ability to communicate often and clearly--both formally and informally. Contacts range from formal program advisory boards meeting at the laboratory itself to informal appearances of laboratory staff at professional association meetings throughout the region. Each client or potential client must know that the laboratory is responsive and purposeful--a respect that comes from staff's demonstrated understanding of a client's problems.

Staff at regional labs don't seem to have preconceived answers but are willing to look and listen. We feel like we've got an investment in the laboratory; therefore, we want our staff to know how to use lab resources and services.

--Deputy state school superintendent

A regional laboratory can do what others can't: oil the wheels of innovation by helping people see how to implement materials and strategies. Continuous involvement between R&D folks and practitioners is critical.

--Professor of education

ONE LABORATORY'S APPROACH

Any given day at NWREL in Portland or on location across the region will find staff and practitioners in deliberation on matters of common interest. If there has been one noticeable difference between NWREL and other R&D performers in the Northwest region, it is in the diverse range of personal and institutional relationships which the laboratory actively cultivates. Most of these interactions are carefully planned sessions to gather input or seek guidance on programmatic directions and activities; many more are the spontaneous variety (a telephone call, a visit at a professional association meeting) to keep the lines of communication open. In both types, a spirit of collaboration and cooperation is evident.

Since the earliest planning days in 1966, NWREL has sought external assistance and input for its R&D activities to supplement the overall review function provided by its board of directors. Generally, there have been three types of external groups:

1. Program Policy Boards--whose members exert a direct influence on program work by setting policy and monitoring results.

2. Advisory Committees--whose members provide advice on planning and conducting work but avoid shifting gears into policy matters.

3. Ad Hoc Panels and Consultants--whose input is short-term and task-specific.

Advisory and Policy Groups

Policy boards are most often used when program and projects are collaborative in nature--that is, when the laboratory is serving as the catalyst in linking a funding agency and other education and community institutions to achieve some R&D task. Advisory committees are typical in programs and projects where the funding agency specifies what it wants quite precisely but welcomes and needs input from the field in shaping the final outcomes.

What advisory and policy groups do is determined by the nature of each R&D effort; however, it is safe to say that most advisory committees or policy boards at NWREL have several of the following functions as part of their charge:

1. Brainstorming Short- and Long-Range Needs

   As part of periodic general planning efforts in an R&D program, this activity can be a time-consuming yet valuable way to involve as many key actors as possible.

2. Recommending or Setting Priorities

Persons invited to lend their expertise are chosen because they know what is happening in a certain field. The priorities identified by external panels usually are followed carefully by staff as they work with funding agencies, identify work tasks, and allocate time.

3. Reviewing Work Plans and Activities

An advisory group or policy board may be asked to determine if R&D tasks are feasible with questions like "Are the proposed evaluation criteria for this activity realistic?" or "What implementation strategies might be most effective?"

4. Suggesting Ideas for Design and Development

Some persons may have been asked to participate because they have experience in what works best in classrooms and can determine if a particular strategy will achieve desired results.

5. Choosing Development Sites

Perhaps the most common need for external advice is on possible field locations for R&D activities. If the external group has been drawn from a regional base, its role here is crucial both in setting criteria and selecting actual sites.

6. Reviewing Products

Another typical assignment for third-party panels of users is to check on product quality at various stages of development. This activity may not require drawing the entire group together, but it does allow members to provide valuable feedback individually.

7. Cementing Field Relationships

Helping interpret R&D activities in the region and spreading the word about products is another common and valuable role that regional advisors play very effectively.

8. Participating in Staff Selection

In some instances, NWREL policy boards have played a special role in the recruitment, screening and selection of certain key staff members for programs or projects.

The way these functions are translated into responsibilities for each policy board or advisory committee varies widely. The tasks given in each case are governed by variables like these:

1. Contract specifications (Is the use of an advisory committee or policy board optional or required by the nature of the contract?).

2. Length of contract (Is there enough time to assemble and use an advisory group properly?).

3. Budget (Is there enough money available to cover expenses or stipends if appropriate?).

4. Size of group (How many people can make effective input?).

After deciding what the group will be chartered to do, the next step is actual selection of members. Some of NWREL's program and project policy boards and advisory committees may have as few as five persons while others approach 20 in number. Criteria like these are often employed by NWREL staff as policy boards and advisory committees are assembled:

1. Demonstrated Expertise

   Persons are sought for their obvious capabilities (e.g., Indian education, adult education, etc.).

2. Balance of Critical Institutions

   The laboratory always tries to remember its key constituents when appointing advisory committee or policy board members: local education agencies, state education agencies, higher education agencies, intermediate units, etc. If appropriate, public and private institutions are also sought.

3. Geographic Representation

   If the contract is regional in scope, then it goes without saying that each state or area should be represented by someone who can reflect unique needs influenced by geographic, legal, or political factors.

4. Experience in Field

   If the contract is highly specific in nature, the persons involved in policy boards and advisory committees should be selected for their understanding of and demonstrated competence in the problem area.

5. Influence on Users

   Remembering that in the final analysis there will be users who will judge the outcomes of this contract, sometimes it helps to have persons in advisory roles whose names are well known or who are in a position to "open doors" where it counts.

6. Sex and Race Equity

Just as affirmative action and equal employment opportunity guidelines help NWREL strive to maintain equity in staffing, so have the same criteria been used in making policy board and advisory committee appointments.

7. Balance Among Roles

Occasionally it is appropriate to include diverse viewpoints by thinking of the roles required to make the eventual product work: parents, citizens, school administrators, teachers, students. On the other hand, depending on the problem area, it might be desirable to balance persons with a highly theoretical orientation with those who have an immediate how-to-do-it perspective.

8. Time and Commitment

To avoid a perfunctory "rubber stamp" role for external groups, NWREL tries to recruit persons who have both the time to do a good job as well as a commitment to the R&D problem under study. Most policy boards and advisory committees meet for day-long meetings on a quarterly basis.

Consultants and Review Panels

Similar in many ways to advisory committees and policy boards are the various consultants and review panels that NWREL regularly brings into its program and project work at appropriate stages. While the functions and criteria for selection are often parallel to those of policy boards and advisory committees, the major difference is in the amount of time involved: in these latter instances, the need for input is specific and immediate and seldom required for an extended period of time.

A sampling of the types of policy boards and advisory committees used at NWREL follows:

R&D ACTIVITY	PROFILE OF POLICY OR ADVISORY GROUP
1. Research on the implementation of a new approach to educational certification.	1. 17-member policy board representing local education agencies, intermediate units, state education agencies, higher education agencies, and school boards.
2. Development of reading materials reflecting three Northwest Indian groups.	2. 10-member policy board with four appointed by the Affiliated Tribes of the Northwest, one from each of the contiguous Northwest states and two appointed by the NWREL executive director.

R&D ACTIVITY	PROFILE OF POLICY OR ADVISORY GROUP
3. USOE Title I Evaluation Assistance Centers.	3. Three regional coordinating councils corresponding to U.S. Office of Education regions involved in the contract. Each council includes the USOE Title I regional officer, two regional representatives appointed by NWREL, one Title I coordinator from each state and no more than three representatives from LEAs.
4. Technical assistance in bilingual education.	4. 14-member group with one from each participating state appointed by its chief state school officer, four from local education agencies, and five appointed by the NWREL executive director.
5. Adult education staff development project.	5. 9-member group composed of four state adult education directors who contract with the laboratory to provide services and the four deans of colleges of education through whom these services are delivered. The regional USOE adult education officer is an ex officio member.
6. Regional dissemination of R&D products.	6. 6-member advisory committee with each participating chief state school officer naming one person to the body.

HOW REGIONAL STAKEHOLDERS FEEL ABOUT "BUILDING CONSTITUENCY-III"

The 47 Northwest respondents praised NWREL's ability to gather people together with various points of view and to encourage them to sit down--often for the first time--to talk over a problem. Many of the respondents believe that NWREL does a better job than most in recognizing the validity and substance of what practitioners have to say.

One respondent noted, "remember that many local education agencies are doing excellent research already in their own way." Several respondents from the local level appreciate the chance to sit as equal partners in the development process with persons from other institutions.

There were some warnings, however, that respondents offered about the use of program policy boards and advisory committees. Some were concerned that involvement of "outsiders" should be considered only to the extent that it is manageable. Another person warned, "be sure to clarify the ground rules first and make the charge very clear to each committee." And after getting started, some practitioners are concerned about the jargon they are asked to deal with as lay persons in R&D.

Some persons from the higher education sector believe that their institutions have been ignored in recent years compared to the initial planning period at NWREL.

HOW OTHER LABORATORIES REGARD "BUILDING CONSTITUENCY-III"

Respondents from the other institutions agree that a laboratory is more than a collection of individuals and programs: it is a network of relationships.

The other laboratories also use committees in a variety of ways to help formulate programs. "It's been eight years since I heard we've had any trouble getting a field test site," said one lab director who involves field practitioners in various aspects of his institution's R&D agenda.

However, the laboratory respondents also offered warnings about the use of such committees. When seeking collaborative relationships, said one director, "we look for people who agree with our assumptions and not those who disagree or question the R&D processes we use." Furthermore, in using advisory committees, remember there are differences in the research and development mode and that used by local practitioners. "We don't ask them to tell us how to do our job, just how to do it more effectively." At least one laboratory surveyed now shies away from committees in favor of technical advisory panels composed of individuals with specific expertise. Other laboratories agree that ground rules for involvement of external groups must be made clear.

Identify Needs

Where should we focus resources?

To make effective use of limited dollars for educational R&D, a regional laboratory must regularly review its programs and projects in light of regional needs and national priorities. Generally, laboratory activities are of two kinds: long-term programmatic R&D to attack a pervasive problem affecting general educational practice and short-term problem-solving projects that serve immediate client needs. Identification of the problem areas where educational R&D techniques can be effective is a difficult but critical first step.

A regional laboratory must stay close to the needs of its constituents and be willing to get involved and be a force for change--emphasizing the use and practicality of R&D results by serving as a vitally needed superstructure that builds bridges between states and their diverse situations.

--Regional USOE commissioner

A laboratory must establish a mechanism for assessing needs, communicating those needs to funding sources, and letting constituencies know what will happen, if anything. When products are developed based on those needs, make sure constituents know about them!

--Dean, college of education

A regional lab's greatest responsibility is to understand the needs of the client and propose a variety of alternative solutions based on the best of research technology.

--State education agency planning officer

ONE LABORATORY'S APPROACH

Identifying needs that would evolve into program ideas was a high priority for the pro tem committee in early 1966 after preoperational planning funds became available. Pro tem committee representatives from each state were to take the lead back home with support from the interim office in Portland. During a busy three-month period, activities like these occurred:

1. Orientation and brainstorming meetings with interested citizens and educators were convened in each of the five states with as few as three sessions in one state and as many as 21 in another. Attendance records show that approximately 5,500 persons had their chance to suggest what directions the new institution should take.

2. Rather than attempting to conduct a regionwide sampling, the pro tem committee decided to use part of its limited planning funds for an in-depth needs analysis in Washington state only. Some 4,000 questionnaires were returned from educators and citizens alike with valuable data reflecting their concerns, hopes and dreams for education.

3. The program committee also began to receive actual project proposals (often with budgets and suggested staff) from various individuals and agencies across the region. Many of these were existing ideas that had been and would later appear in ESEA Title III hoppers or as basic research requests for federal cooperative research grants. The problem facing the committee was how to deal with each need. Gradually, the list was narrowed from 50 to 35 using criteria similar, in fact, to those applied as NWREL began to prioritize proposal activities for 1978-82 planning with NIE (see page 160).

4. Using data gathered from each of the above activities, the interim board and staff identified 13 target areas and 12 "others" that would be submitted to USOE in a March, 1966 preliminary plan for operational funding in 1966-67. Further revisions, based on USOE feedback, reduced that list even further by April 30, 1966, with five program areas and a variety of subactivities to receive R&D attention during the first laboratory year. Those four areas were:

   - Conditions which hinder teaching effectiveness.
   - Instructional problems unique to small schools.
   - Education for ethnically different groups.
   - Encouraging the use of validated innovations.

   A fifth category titled "development of additional programs" was to become the basis for a variety of later activities.

By late 1967 and early 1968, two of the target priority areas had lost their separate identities, however:

- "Conditions Which Hinder Teaching Effectiveness"--which had tried to address issues like how to help teachers find more time to teach--proved to be so amorphous that its essential pieces were merged into other program areas, primarily "Encouraging the Use of Validated Innovations." Indeed, the latter program was later retitled to become a large and successful ten-year effort better known in the 1970s as the Improving Teaching Competencies Program.

- The "Development of Additional Programs" category became a "holding tank" where good ideas could be pulled out if the funding agency agreed. One of the suggestions--Applications of Computer Technology--also emerged as a program in its own right in later years. The same is true for a project to adapt vocational training materials from the Department of Defense, which was the lab's first step into a much greater emphasis on the relationship between education and work in the 1970s.

Each year since 1966, the NWREL board has reexamined its basic institutional mission--always keeping regional needs and priorities in mind. Not until early 1976, however, did the lab again mount a formal, comprehensive, regionwide needs identification process that even approaches the magnitude of that conducted in the spring of 1966. In addition to the board's annual input between 1966-1976, a variety of other formal and informal techniques alike have typically been employed.

- Staff are encouraged to keep in touch with educational trends locally, regionally and nationally as they circulate in the field. Such professional input is particularly useful in program-level planning.

- Program and project task forces and advisory committees were established throughout the laboratory. These typically have had broad representation from regional constituents. Their need sensing abilities are helpful in refining program priorities and advising staff on the best way to conduct field activities.

- Work by the executive director--constantly in contact with chief state school officers, college presidents and deans, association heads--has been considered one of the best needs sensing mechanisms at NWREL. The director spends a great deal of time in the field listening for problems and making the lab's interest and willingness to help and serve known.

Turning Needs into Action

It is one thing to identify needs, set program priorities and start the R&D wheels in motion; it is yet another to follow through so that people know you did in fact address their needs.

Despite the ups and downs of federal funding and policy changes, the ten-year mark for the laboratory in 1976 found that many of the early needs projections in 1966 had in fact been fulfilled.

1. Activities built around "Encouraging the Use of Validated Innovations" emerged as the Improving Teaching Competencies Program. This effort is perhaps the laboratory's best example of extending available research and adapting it to field situations with extensive practitioner involvement. The program has produced a number of nationally recognized teacher training packages now in use across the country. An R&D schedule appearing in the laboratory's 1968 annual report predicts that most work would be completed and products installed by 1977 as actually occurred. Today the Improving Teaching Competencies Program has changed its focus as part of a new and expanded dissemination program at the laboratory using its expertise to train linkers as part of a regional exchange effort sponsored by NIE.

2. The 1966 problem area titled "Education for Ethnically Different Groups" required several shakedown months to narrow its focus on the needs of special populations in the Northwest. Here again we find that over the ten-year period a number of significant products have emerged. The Multicultural Reading and Language Development Program has produced several noteworthy materials and products including the Alaska readers, the Guam readers, and the present Northwest Indian reading and language development materials.

3. The 1966 program area titled "Instructional Problems Unique to Small Schools" developed into the large-scale program now known as the Rural Education Program. This prominent NWREL activity moved from its early focus on instructional technology to its later emphasis on community change strategies to help school leaders and local citizens plan for comprehensive educational services in rural settings.

The Second Decade

As the laboratory prepared for another decade of service coinciding with NIE's three- to five-year solicitation in late 1976, the familiar cycle was repeating anew:

	PERSONS INVOLVED	PURPOSE	DATE
1.	Northwest educators*	Get practitioner input on regional priorities	February, 1976
2.	Chief state school officers	Get input on state priorities	Quarterly meetings at NWREL
3.	Program policy and advisory groups	Get input from substantive specialists	Regular meetings
4.	Ad hoc committee of NWREL board	Recommend revisions in long-range planning guidelines and annual program policy	May, 1976
5.	NWREL board of directors	Provide updated long-range planning guidelines and annual program priorities	June, 1976
6.	Ad hoc committee of NWREL board	Provide input on mission statement and preliminary program plans	January 20, 1977 February 15, 1977
7.	NWREL board executive committee	Adopt mission statement	February 15, 1977
8.	Ad hoc committee of NWREL board	Recommend program priorities for NIE 3-5 year funding	March 15, 1977
9.	NWREL board of directors	Review and adopt program priorities for NIE planning purposes	March 16, 1977
10.	NWREL board executive committee	Approve NWREL submission for NIE 3-5 year support	May 6, 1977

*Northwest educators were asked in February, 1976, to identify: (1) groups of people in their school or district with a particular problem or need not being adequately met, (2) curriculum areas most in need of improvement or expansion, (3) instructional areas most in need of improvement or expansion and (4) administrative and management functions in most need of improvement. Responding to the mail survey were 407 elementary and junior high teachers, 133 high school teachers, 678 elementary and junior high principals, 222 high school principals, 216 superintendents and 30 board chairpeople.

Based on activities 1 through 4 above, the NWREL board of directors ranked a number of program priorities in June, 1976. Their policy action gives the executive director authority to initiate planning for contracts with clients in these areas that will benefit the region. In other words, if a funding agency were interested in new ways to evaluate reading programs for adults, the laboratory would consider pursuing such work. Proposed programs or projects which affect more than one of their priorities would naturally be looked on with greater favor by the board.

CURRICULUM AND INSTRUCTION

Content Areas

1. Reading and Language Development
2. Environment/Energy
3. Career Education
4. Ethnic Studies
5. Health
6. Vocational Education
7. Math and Science
8. Social Studies
9. Creative Arts

Instructional Methods

1. Motivation of Students
2. Competency Based Instruction
3. Bilingual/Multicultural Education
4. Individualization
5. Alternative Education
6. Accelerated/Enrichment Activities
7. Home/Parent Instruction
8. Use of Technology

ADMINISTRATION AND MANAGEMENT

1. Assessment and Evaluation
2. Planning
3. Staff Development
4. Bargaining/Negotiations
5. Citizen Communications/ Involvement
6. Finance
7. State/Local Problem Solving
8. Management Systems
9. Validation/Installation of Successful Products and Practices
10. Educational Equity
11. Grading/Graduation Requirements
12. Organization and Staffing Patterns
13. Student Discipline

TARGET POPULATIONS

1. Adults (including senior citizens)
2. Gifted/Talented Students
3. Ethnic Groups
4. Handicapped Students (including low ability)
5. Rural Students
6. Young Children (early childhood)
7. Post High School Students
8. Urban Students
9. Dropouts
10. International Education

In deciding what major R&D programs it should seek, other variables must be considered in addition to the program priorities listed above. The following criteria were applied by laboratory staff and an ad hoc committee of the board in planning and considering programs for inclusion in 1978-82 plans:

CRITERIA	INDICATORS
Does the program meet regional and national priorities?	...regional priorities
	...emerging national priorities
	...equal educational opportunity
Do users recognize the potential products as meeting current and projected needs?	...based on local needs assessments
	...user panel reviews
Is it a timely concern?	...receiving high priority now from a substantial educational group
	...immediately needed and appropriate now
	...anticipated future need
Is it socially significant?	...a segment of population whose needs have been overlooked
Is the need presently being met?	...present solutions are inadequate
	...alternative solutions are needed
Does it fit within the mission of the laboratory?	...program policy
Can local needs be met effectively with available materials by assisting in implementing and using appropriate systems?	...validated products, processes already available
	...dissemination channels available or possible
	...cost-effectiveness
Is it amenable to R&D efforts?	...expertise available
Can significant change be achieved?	...sound theory
	...statistical evidence
Does the proposed activity articulate effectively with existing and evolving efforts at local, state, regional, national levels?	...stated goals
	...existing mechanisms

As opposed to responding to just anybody's special cause or transitory concern, by applying a whole range of filters, a regional laboratory is able to (1) sort out real needs that (2) can be attacked in an R&D mode from (3) a regional base with (4) national implications. Two other considerations discussed elsewhere in this report are also important filters in deciding which needs can be addressed through R&D programs or projects:

1. The impact on the organization of doing a credible job in a proposed area.

2. The willingness of a funding agency to "buy into" the task.

HOW REGIONAL STAKEHOLDERS FEEL ABOUT "IDENTIFYING NEEDS"

Northwest practitioners were concerned about a regional laboratory's sensitivity to local problems and want NWREL to remember its constituents by "meeting our needs as we see them in the field." They like to see the laboratory "out in front" of emerging needs--to be "proactive not reactive." Since most respondents are already part of established institutions, they envy the laboratory's freedom from external influences and traditional patterns when it comes to being sensitized to emerging problems and bringing solutions to bear.

While long-term planning based on identification of needs is a concern of Northwest practitioners, once NWREL's priorities are "published" they feel more comfortable about how to access the laboratory. They see NWREL in a unique position to coalesce needs and articulate problems on a regional base--problems they may not be able to generate enough support for locally. Yet, they also like NWREL's ability to move from one need to another rather quickly if necessary.

Some are concerned when NWREL embarks on a program that does not have obvious regional support. There was even one suggestion that before NIE itself proposes any program it should ask practitioners in the field if they agree the problem and proposed solution are appropriate and important. Required collaboration was suggested as a precondition for most laboratory contracts.

The majority of practitioners interviewed believe the laboratory should continue to maintain its problem-solving (regional services) capability from an R&D base. They worry that certain large-scale needs will get top priority while some of their more immediate difficulties get overlooked. "The squeaky door gets the oil" said one who wondered if there are other ways to assess needs than the typical survey approach. These respondents believe that regional needs do have to be meshed with national

data. Yet, there was some feeling that needs assessment technology can be overdone, with several interviewees voicing little enthusiasm for "paper and pencil" needs inventories except for their "PR value." Several wondered, in fact, if a good, active board of directors that represents the entire region couldn't do the job of needs assessment just as well as a regionwide survey.

Practitioners made these suggestions as new laboratories begin to identify and prioritize needs:

1. Look for areas that are unattended by others.

2. Talk more with teachers.

3. Collect as many existing needs assessments as possible from districts and states.

4. Bring key practitioners together for brainstorming.

5. Never promise anything until you're sure the money is available.

6. Tie in with business, industry and labor to see if needs they have are shared in education as well.

7. Beware of special interest groups that tend to make people believe their needs are more important than others.

HOW OTHER LABORATORIES REGARD "IDENTIFYING NEEDS"

Respondents from other labs expressed similar concerns about needs assessments being a "phony" process, preferring to call the process "problem identification" and using their board of directors and existing state and local findings for this purpose. One director is concerned about how to separate needs versus problems versus concerns. He noted, however, that a survey can be useful in describing the wisdom of a piece of work once it has been proposed or as a way to "develop a common lexicon."

Most respondents from the other labs believe that needs sensing should be a continuous process of staying in touch with the grassroots; however, there was some concern that endless committee meetings can be overdone. Perhaps because community involvement is so important today, some respondents believe that a laboratory must keep its sensors out to understand what the general public is concerned about, too--for example, said one board chairperson, "the back to basics movement is a powerful thrust today, which is hard for some educators to understand." But said another

respondent, the fact that "basics" comes out on top in a survey begs the question of what should be done in an R&D sense. "It's like a kid's Christmas list. You have to watch out for noisy themes."

There was a common concern that even as needs are identified on a regional base with specific programs proposed to solve those needs, federal funding does not come through when it would help most. In the past it has been difficult to convince federal agencies that support is required on particular regional R&D problems that have national implications. Laboratory respondents are hopeful that three- to five-year planning will help resolve some of that difficulty.

One laboratory chairperson believes that laboratories should not use their needs sensing capabilities for regional purposes only but should feed those needs forward for a national "trends analysis" that can help all laboratories as well as NIE determine where priorities should be set.

Specify R&D Functions

How can we best meet these needs?

Most problem areas in education--whether widespread concerns affecting general educational practice or an immediate issue facing a single educational agency--are amenable to a systematic R&D process that employs most or all of the following functions in varying degrees: (1) Problem Clarification, (2) Research, (3) Development, (4) Evaluation, (5) Dissemination, and (6) Implementation. General R&D Service Assistance (7) and Marketing Activities (8) fit right in the cycle as well.

A regional laboratory is able to define problems, conduct research and development activities and then followup with implementation--it can visualize the entire continuum, not just one part.

--Regional program officer, USOE

A regional lab should not concentrate on basic research but on the application of basic research--developing products teachers can really adapt and use.

--Chief state school officer

A regional laboratory must answer the requests it gets or people will just turn away.

--Executive secretary, school board association

If a regional laboratory doesn't include dissemination services, it's dead.

--Dean, college of education

We have found that materials that were originally developed for entirely different populations (Alaska primary readers) have completely changed our approach to reading instruction.

--Superintendent, elementary school district

ONE LABORATORY'S APPROACH

There are eight essential elements involved in the R&D work performed at NWREL--the kinds of observable activities people can see as opposed to behind-the-scenes management and organization functions:

1. Problem Clarification
2. Research
3. Development
4. Evaluation
5. Dissemination
6. Implementation
7. General R&D Service Assistance
8. Marketing Activities

We will look at each of these functions separately, while remembering that not every element is used in the same way in the same sequence or even in all projects and programs in the same fashion.

Problem Clarification

Just as not every educational problem can be solved using R&D technology, not every R&D assignment will be handled the same way. The first and most difficult step is to break the problem into pieces so that the staff zero in on the right things. This is why R&D specialists who know how to search for information, who have personal experience in the school business, who understand research and development technology--yet who have common sense and a "can do" attitude--are essential to a regional laboratory.

NWREL staff work just as hard on problem clarification with program officers in a major funding agency as they do with staff in a small school district seeking help on an assessment and evaluation problem. Questions like these are generally addressed:

- Can we agree on basic definitions?
- Are there some basic elements that can be separated out and prioritized?
- Can these be translated into units or activities of work?
- What products are expected in the end from each activity (documented processes, student materials, policy recommendations)?

- Who else should be involved in looking at this problem?
- Are resources adequate for the task?
- What do we know about the state of the art right now without doing any further search and synthesis?
- Where are the pitfalls likely to be?
- What are the peripheral issues that surround this problem?
- How will spinoff R&D needs be captured and recalled at the appropriate time?

Problem clarification is often very time-consuming and costly in terms of staff energy. And sometimes there is a "no go" decision. In most cases, the client expects far more than is possible--even with substantial funding. It is times like these when NWREL staff must bring together another set of highly important skills:

- Demonstrated understanding of issues based on prior experience.
- Gentle, warm persuasion.
- Firm, steady guidance.
- Acceptance of others' opinions, yet professional commitment to quality work.
- Openness and candor mixed with a good sense of humor.
- Occasional table pounding and shouting, applied sparingly.

Still there are times when neither the client nor the laboratory is really sure how a problem should be solved. In these cases, laboratory staff must be prepared to:

- Point to cases where a similar procedure has worked successfully.
- Offer to come back with a series of specific alternative plans.
- Accept the client's suggestions and weave them into a strategy that looks like it will be comfortable to all.

What should emerge out of the problem clarification process is a work statement that specifies who is doing what, when, where, and for what reasons. A rule of thumb for R&D staff in regional laboratories is, "If you can diagram it, you can do it." While a neat system's approach doesn't work in every case, it illustrates the importance of breaking a problem into manageable units so everyone knows what will be done to reach closure.

However, it is not uncommon for the time spent in problem clarification to end with a decision that the client's problem can be better solved by another provider--if, in fact, it is a problem that can be tackled using R&D techniques at all.

Research

People in the R&D world often use the word "basic" and "applied" when talking about educational research. Without trying to put a value on either kind, let's agree there is research that produces new knowledge, that contributes new theories, that helps decision makers sort out policies, that helps teachers understand why a child behaves in certain ways under certain conditions, and that suggests how teachers might do things differently given certain skills.

All of the above are practical in a regional laboratory, but the emphasis is always on improvement of specific educational practices. NWREL tries to strike a balance between basic and applied research so that any time during the course of a project or contract NWREL staff may be involved in doing some of each. Still, the major weight of interest from the field and funding agencies alike is usually on the applied side.

Whatever research task is underway, NWREL's methodology and findings will try to meet standards for quality accepted by the research and development community as well as the general educational community. The objective is that developers and users alike will have confidence that their decisions are based on a solid foundation.

How would you know the difference between basic and applied research if you walked in and asked to see some of each? Indicators like the following may help make the distinction:

BASIC RESEARCH	APPLIED RESEARCH
1. Narrow topic with few variables. Researcher tries to hold variables constant and controlled.	1. Broad topic with many variables, recognizing that variables change in naturalistic settings.
2. Emphasis is on causal relationships.	2. Emphasis is on impact.
3. Emphasis is on technical understanding of a problem. Implications for more research are often specified.	3. Implications for immediate practice and problem solution are specified. Emphasis is often on issues.
4. Few investigators are involved. There is limited external coordination.	4. Coordination required among several staff, some of whom have extensive field contacts.

BASIC RESEARCH	APPLIED RESEARCH
5. Researchers are usually from a single discipline.	5. Researchers are often drawn from interdisciplinary backgrounds.
6. "n" is known.	6. "n" is hard to pin down.
7. Interest in the topic is limited to a relatively few people, unless controversial area.	7. Widespread interest and applicability of the topic is obvious.
8. Environment often carefully controlled (e.g., one-way glass for observation).	8. Field settings, say in school districts, are preferred.
9. Long, complex title on a thick document that is hard to understand.	9. Short, action-oriented title on an inviting document that is fairly easy to approach and read.

As noted, a regional laboratory conducts both types of research--basic and applied. Now let's look at how a laboratory uses its research capacity in varying amounts at varying times. Without experience and access to such a research base, in fact, none of the other work it does has meaning.

Staff at a regional laboratory will move in and out of the following research "modes" with relative ease, calling on staff or consultants with technical expertise as needed depending on the particular type of problem at hand.

1. Searching Out and Synthesizing Others' Research

   Once the problem areas addressed have been clarified--often after an initial exploratory survey of contemporary wisdom on the subject--most R&D efforts require a thorough search of current literature and practice to begin building a framework that makes sense in both empirical and practical terms. The information retrieval capacity of the laboratory (more accurately, perceptive information specialists who anticipate staff information needs and have quick access to a variety of data banks) is essential for this kind of research activity. Many of the small service requests received at the laboratory, in fact, begin (and end) with this initial step in the R&D cycle.

   Once information has been searched out, however, staff must begin the critical synthesis process that sifts out important facts and puts the data into context so that conclusions and recommendations can be drawn to guide later development. Search and synthesis activities never really end, however, as staff continually try to keep abreast of literature in the problem area.

2. Extending Others' Research

Another kind of research activity occurs when products will be adapted directly from specific knowledge and understanding created by others. Much of the early work of NWREL, in fact, was clearly an extension of work completed or in progress by nationally noted specialists in teaching and learning. To translate their theories into training materials required detailed familiarity with the original research and often involved the original researchers in a consultant capacity. Testing to determine if similar results would accrue under field adaptation is a unique kind of research process in its own right as well as being a creative translation procedure.

3. Evaluation and Assessment Activities

Of continuing importance in the work of NWREL has been its ability to conduct carefully controlled experimental research as well as large-scale surveys. State agencies have frequently requested NWREL's help in statewide needs assessments, sampling hundreds of persons on a specific area of interest for input into state policy making and planning. Certain programmatic R&D efforts--say, building a model for individualized instruction--often require control or comparison group arrangements as part of the experimental design to provide users with some assurance that the effects can really be attributed to a program treatment. The prospect of bringing a variety of research and evaluation methodologies to bear on large-scale R&D ventures--and not those built from the educational psychology tradition alone--is enough to whet the appetite of any good social scientist. Anthropological and sociological case study approaches, for instance, often provide unique and useful insights into human growth and development--findings that practitioners can easily relate to.

4. Spinning Off New Research

In the course of conducting research activities, it is not uncommon for staff to uncover new understandings and discover gaps where additional work is required. In more cases than not, information of this sort is captured by staff and reported to funding agencies and to the research "community" through journals, monographs, convention presentations, and the laboratory's own Research, Evaluation and Development paper series (RED series).

Staff in a bilingual education program, for instance, may discover there is apparently no adequate instrumentation to use in assessing linguistically-different children and they might wish to invent new instrumentation using new innovative techniques. When new territory is opened or gaps need to be filled before moving to development, staff must either (1) seek additional funding to conduct the research on a limited duration, (2) carry it off on an

ad hoc basis squeezed into regular work, or (3) move ahead, recognizing that "it's nice, but not necessary."

5. Making New R&D Discoveries

The laboratory's ten-year background in multicultural reading and language development has confirmed what many professional educators had previously doubted--that students, parents, and other community members can participate in the formulation of meaningful and marketable R&D products. This fact has been a research contribution in its own right and one that is not only fundamental to NWREL's operational philosophy but is a significant contribution to the nation's understanding of educational R&D as a systematic endeavor.

Development

Moving good ideas from research to practice is the heart of a laboratory's work. At any one time across the organization, more people will be involved in development activities than any other thrust.

1. Setting the Stage

The kind of development work the laboratory prefers is that which includes practitioners in the field as partners in the process. There are at least four ways this has happened:

- Appropriate agencies--preferably members of the laboratory--are identified and invited to consider releasing staff time for a particular venture. Perhaps some kind of demonstration project or a test site will be needed, requiring input from teachers in planning, design and field trials. Agreements may be sought to allow laboratory staff to participate and observe in classrooms or perhaps share agency office space temporarily.

- Occasionally, the laboratory may actually turn over or share certain aspects of the development process with a separate subcontractor or collaborating agency whose responsibility it is to design and operate the program while laboratory staff devote their attention to documentation, evaluation and other R&D functions.

- A more common practice is to establish an advisory committee or policy board to make recommendations at regular intervals. Program and project directors try to select members who represent a cross-section of interests from member states.

- To supplement staff capability and practitioner involvement, the laboratory frequently calls upon consultants from around the country in a specialty area to provide assistance in solving developmental problems and reviewing interim results.

2. In the Pipeline

As is the case in other laboratories, NWREL has used a systematic approach for the conduct of much of its development work. The steps are logically linear but permit flexibility and can be adapted to the varying demands of small service projects as well as large-scale programs. Decision points are built in at regular intervals based on evaluation data gathered during each stage:

- Concept Stage. As part of the problem clarification process mentioned as step one in the R&D cycle, the emphasis here is on conditions to be effected, outcomes expected and products to be delivered.

- Feasibility Stage. Growing out of preliminary research activities--also discussed earlier--this stage focuses attention on the practicality of the proposed product(s), production requirements and whether or not similar products are on the market already.

- Operational Planning Stage. This step includes formulation of work plans, budget, negotiations with client, and internal laboratory reviews.

- Exploratory Stage. Preliminary designs are prepared and tried out with a limited number of potential users under controlled conditions.

- Prototype and Pilot Test Stage. Revisions based on the exploratory test are fed into a prototype version to be tested intensively with a limited number of users under controlled conditions.

- Interim Product and Field Test Stage. Again, revisions may be called for as the test moves to the actual target group in a realistic setting using a rigorously selected sample.

- Product and Operational Test Stage. Now it's time for the final form to be released for broad scale implementation so that long-term effectiveness can be measured with minimal laboratory controls.

- Installation Stage. Dissemination, installation and marketing activities now take over, assuming the laboratory itself is satisfied the product can be released. Details on these steps will be discussed subsequently.

Again, this is an ideal model and is modified more often than not by each developmental activity the laboratory proposes. One test stage may be dropped entirely, for instance, if all parties feel that a particular step can be short-circuited.

3. Techniques in Product Development

A distinguishing feature in the above development process is documentation of real events so that they can more easily be replicated in other settings. Rather than designing processes and materials in the ivory tower, then handing them over to evaluators to test in the field, a favorite NWREL mode is to combine staff with design, documentation, and evaluation skills so that data from observations and interviews of teacher/student interaction are accurately reflected in eventual products without overlapping and duplicating efforts in the field. The end result is that users can get a behind-the-scenes look at what works and what didn't at the original developmental sites. Rather than cut-and-dried, how-to-do-it manuals, practitioners will have alternatives to consider as their own implementation begins--ideas that are well documented and validated and not just someone's fantasy.

4. Types of Products

A laboratory is usually capable of working in a variety of media serving a variety of audiences. The primary field audiences for laboratory materials are administrators, staff and students. A limited number of products are never meant for broad field exposure--e.g., policy studies for state and federal planners or technical evaluation reports for decision makers.

Print media are the most common outputs of NWREL's R&D work: readers, manuals, handbooks, workbooks, guidebooks, teaching aids, kits, charts, and the like. Nonprint media include slide tape presentations, filmstrips, videotapes, audio tapes, 16 mm. films, transparancies, and so on.

Valuable team members throughout the development process are writers, editors, graphic artists, photographers, and various specialists who design and reproduce the words, sights, and sounds of educational R&D.

Evaluation

Rigorous examination of how well products work in the field is an essential ingredient in educational R&D and distinguishes the kind of work performed by labs, centers, and other R&D contractors from just any product developed and published through commercial channels. There are two types of evaluation employed during most R&D efforts at NWREL. One is a continuous, formative evaluation process and the other is outcome oriented--usually known as summative evaluation.

Formative evaluation is used to monitor and assure quality control during the development and testing of a new product and is designed to help program managers make adjustments in the product or program as work proceeds. Formative evaluation data gathering techniques are usually built around questions like these:

- Are work activities moving on schedule?
- Where are the bottlenecks likely to occur?
- Do users seem to understand the materials they are working with?
- Are advisory committee members making effective input?
- Are management objectives being met?
- Are costs being kept within reasonable figures for eventual users?
- Are design objectives being followed (e.g., are users able to do what they are supposed to do in the time allowed)?

Evaluators and program managers work together to determine the formative evaluation questions that need to be answered. Evaluators often prepare interim progress reports on each question. Recommendations for improvement are usually left to others, though evaluators may also make suggestions for management action. There is usually enough flexibility in the design of formative evaluation techniques to add new questions along the way.

Some formative information may be useful in a final or summative evaluation, but in the latter approach, a different set of technologies is used. Research designs that call for pre- and post-testing and experimental and control or comparison groups are common with emphasis on product effectiveness over a specified period of time.

Here again, careful planning by evaluators and other R&D team members is critical at the outset of a project or program. All parties must agree on certain fundamental issues:

- What are we trying to achieve in this effort?
- Are these objectives spelled out clearly?
- Can these objectives be measured using quantifiable or non-quantifiable means?
- Are there instruments or approaches that will measure or help describe the intended outcomes?
- If not, can we devise our own?

- Will there be any advantage in using scientific sampling techniques, control and comparison groups or other experimental techniques?
- Will it be possible and feasible to arrange those conditions in the field?
- Do we have persons who can handle this work?
- Who will gather and synthesize the data?
- How will the data be analyzed?

Summative evaluation reports are typically prepared at the end of major milestones. The final report for the project will attempt to draw an honest picture of how well the R&D product can be expected to work elsewhere based on the long-term developmental testing that occurred.

Implementation

Seldom does a laboratory ever let a product move down the R&D assembly line without preparing a plan for eventual training and technical assistance to help users in the field install the product. The types of help users will need will vary according to the complexity of the R&D product:

- Brief notes to the user in the foreword.
- A separate user's guide or audiovisual presentation.
- A complete installation manual with illustrations.
- A comprehensive set of how-to-do-it handbooks with examples.
- A short two- or three-day orientation session.
- A complete one- or two-week training workshop.
- Periodic followup technical assistance visits in person or by telephone.
- A comprehensive manual that "turnkeys" the responsibility for technical assistance to other agencies who can handle the above tasks for their own local constituents.

An ideal situation in smaller projects is to develop products that "stand alone" without special training or technical assistance. But when it comes to major innovations that call for reshaping school structures, some prior training and "handholding" may be necessary as users break new frontiers. On the other hand, a regional laboratory does not often want to be the institution that provides implementation services forever.

For that reason, training and technical capabilities for most laboratory-developed R&D products are usually transferred to state and intermediate agencies or publishers whose business it is to help users adapt innovations to local conditions.

One unique service a laboratory often helps maintain during the initial diffusion stages of a program is one or more demonstration sites where interested users can see a product in action. In the early days of laboratory development, in fact, there were visions of laboratories operating demonstration classrooms within their own facilities. Seldom, if ever, does this occur today.

Dissemination

From the initial problem clarification stage, laboratory staff should be laying plans for eventual dissemination alternatives. The dissemination function at a laboratory hinges on the staff's ability to search out, store, retrieve and spread the word about alternative solutions to educational problems in the manner of a broker who offers several choices to a client or who refers the client to someone else who can better help.

Effective dissemination requires a knowledge of products that can be readily accessed from a wide variety of sources and networks--including other R&D providers. No matter what the project or program underway at a laboratory, someone is going to call at least weekly and ask:

- Send me everything you have about "x."
- When will your version of "x" be ready?
- Where can I go to see a program like "x" in action?
- Who else is doing work on "x?"
- Where can I buy some materials on "x" from others?

This is why it is important for laboratories to maintain ongoing ties with other R&D providers. Staff will be able to answer these questions better if they anticipate what questions might be coming in from the field, what possible information sources may already exist in the laboratory and how to connect up with external resources.

General R&D Service Assistance

In the course of conducting R&D work on a given topic, very few weeks pass before regional and national constituents begin to take notice of the laboratory's efforts. Requests for services beyond the contracted scope of work negotiated between NWREL and a funding agency must then be dealt with. Here is where skillful organizational ability by managers is required: honoring regular contract commitments to deliver products on time yet responding to field needs for problem solving help in the same general content area.

A services component is a unique feature in major programmatic R&D efforts at NWREL and in some of the smaller ones as well. Staffing for these activities may require some juggling. Frequently, there are other programs at the laboratory that have generated products useful in meeting the clients needs--or again, the laboratory may be able to use its R&D "connections" nationally to help build a set of alternatives for the client to consider. It is through contacts and working with clients in a service mode that constituents can begin to see how the R&D process can work for them. Providing field services is also one way a laboratory senses needs and defines new R&D thrusts.

Marketing

Capping most R&D efforts at a regional laboratory is a marketing program which tries to reach users both regionally and nationally in a deliberate, systematic fashion. Marketing decisions are always subject to approval by funding agencies and the laboratory's own internal quality controls. A number of laboratory products are in daily use in thousands of classrooms today, thanks to vigorous advertising and word of mouth advocacy. Marketing can take any number of forms:

1. Release through private commercial channels.

2. Release under the laboratory's own imprimatur as a publisher and distributor.

3. Release into the public domain via the Superintendent of Documents, U.S. Government Printing Office.

4. Release through ERIC.

Marketing techniques employed at NWREL are becoming bolder and more visible. Catalogs and brochures for general distribution and direct mail are standard with notices in professional journals also becoming commonplace. Conferences and convention displays have some merit as does the "free" awareness that comes through professional reviews and favorable "notice" in the educational press.

Marketing staff at a laboratory must constantly help their colleagues think of how their products will eventually be distributed. Costs and packaging are critical variables as are illustrations, format, style, etc. Copyright clearances, negotiations with publishers, and the production process itself are time-consuming factors that affect how long it it takes to get products into users' hands.

Even the smaller products growing out of limited service contracts are often valuable elsewhere if redesigned or reconfigured with other laboratory materials to fit the needs of a broader audience.

Summary

To summarize the above R&D functions, and at the risk of making the basic R&D tasks at a laboratory sound overly simplistic and sequential, an illustration is offered in one problem area arising from a hypothetical but emerging regional need:

1. Problem Clarification

   State chief school officers report that effective bilingual education implementation has been slow. Laboratory staff sit with the chiefs and bilingual education specialists at a quarterly meeting to examine further what the particular problem is. Followup visits with staff in the appropriate agencies back home reveal that several variables must be dealt with, one of the most perplexing being how to explain bilingual education to local communities.

2. Research

   Based on the above conversations, staff at the laboratory lay out a problem matrix and run an initial search for reference materials on bilingual education implementation through the laboratory's information center. Several days later a staff task force proposes a research study titled "Problems in Local Implementation of Bilingual Education: A Policy Study." This proposal will be submitted to an appropriate federal agency interested in the problems of bilingual education.

3. Development

   Growing out of the policy study are a number of specific recommendations, one of which deals with problems of implementation of bilingual education in the middle grades--particularly as it relates to parental acceptance and support. Staff at the laboratory then develop a proposal for a two-year program titled "Parental Effectiveness in Bilingual Education: Procedures and Materials for the Middle Grades." The proposal is subsequently funded and staff begin a two-year development process.

4. Evaluation

   Evaluators who join the R&D team are given two tasks: formative evaluation to assist program managers and summative evaluation to validate product effectiveness. The first formative evaluation report submitted by evaluation team members occurs six months after the project is underway. Its title: "Questions Local Staff Asked During Field Test of Parent Guide to Bilingual Education." At the end of the two-year process, a summative report was issued titled "Effect of Parent Guide to Bilingual Education at Ten Field Test Sites."

5. Dissemination Services

Shortly after the project begins, a teacher educator calls and asks about in-service materials on bilingual education. Laboratory staff describe the current project and extend an invitation to come by laboratory offices and review their regional and national files of materials on bilingual education implementation.

6. Implementation Services

As part of the contract scope, an implementation strategy is designed to make sure the product can be used as it should. Laboratory staff arrange a series of five workshops in the region and invite local districts and colleges in those areas to send trainees who are willing to learn how the materials can be used and become regional resource persons to help keep the effort alive. The laboratory becomes a trainer of trainees in this fashion, gradually turning the capability over to existing institutions.

7. General R&D Service Assistance

Word of mouth spreads about the laboratory's work in bilingual education and particularly the problem of parental involvement. School District X seeks the laboratory's assistance in drafting a policy statement and operational procedures on bilingual education. The laboratory's project manager reviews progress on the contract and determines that there would be staff time to be released for a small service contract enabling staff to work with the local district on such a policy.

8. Marketing

At the outset of the project, laboratory marketing staff discussed with project staff the kinds of products intended during the course of the two-year effort. Several are outlined--one being a parent guide that may have wide application not only in the region but around the nation. Subsequent discussions with the funding agency reveal that it would be possible to secure a copyright agreement and release allowing the laboratory to produce and distribute such a publication if no other publishers are interested. When initial drafts are prepared and mockups ready, a publishers' alert is conducted and a publishing agreement is subsequently negotiated with a minority-owned firm. Title for the publication: How to Help Your Child Cope in an English-Speaking Classroom--A Guide for Parents of Bilingual Junior High School Students (75 cents).

While the above example is hypothetical only, it does illustrate how a laboratory might use the eight essential R&D functions in approaching a typical problem. To ascribe linearity to the process is misleading,

remember. Some functions overlap and are continuous; others may require a little effort spasmodically; still others may not be appropriate at all for a particular R&D problem.

HOW REGIONAL STAKEHOLDERS FEEL ABOUT "SPECIFYING R&D FUNCTIONS"

The 47 respondents in the survey of Northwest practitioners are not unusually conversant with the R&D terminology that is used everyday at the laboratory in Portland. However, each believes very strongly in the fundamental principles that underlie those basic elements and few believe that NWREL should alter its usual practices in carrying out its work.

What seems to impress Northwest practitioners most is the ability to contact the laboratory and in one stop accomplish all they would like to have done. They appreciate a laboratory staff that is versatile enough to handle long- and short-term problems alike.

Problem Clarification

NWREL clients apparently appreciate the staff's approach to problem solving. They believe that laboratory staff never have preconceived answers and that staff are willing to look and listen and sort out the alternatives before jumping in and tackling a problem. They know that problem definition is difficult. One person warned that R&D must never be used to place blame on activities underway in any local education agency. For instance, a client should never try to use R&D to "threaten" constituents.

Research

The respondents believe that basic and applied research both have practical value in the work of a regional R&D institution. One person observed that it is the research base that helps the laboratory commit its clients to problems as well as solutions, not allowing them to focus on one and not the other. Preliminary research is very important in determining priorities, needs, and trends say these practitioners. They agree with the original visionaries of laboratories who saw an emphasis on moving theoretical research to practical application by building primarily on the results of basic research performed by others.

Development

NWREL's practitioners believe that the laboratory's ability to deliver quality products in a timely manner is a strong plus factor in its favor. When it comes to carrying out development work, many respondents are aware of the laboratory's early commitments to involve a variety of constituents in the development process. They see the laboratory as a catalyst with great unused potential even in 1977. Some wish the laboratory would again draw together teachers, administrators, and board members to talk about common problems as apparently happened in the 1965-66 planning stage.

Dissemination

One elementary principal said point blank "NWREL is the greatest source of information on improvement in our schools that we have ever had." Several respondents believe the laboratory should emphasize its dissemination capabilities more forcibly. They wish more people knew about the information retrieval ability a laboratory can provide as well as its brokerage skills in helping constituents avoid reinvention of the wheel. "The laboratory staff offers a great resource and information base from which to draw" said one who was impressed by the lab's potential ability to "plug in" to a national network of R&D resources.

Implementation

The most enthusiastic responses of all were reserved for implementation and technical assistance services that the laboratory typically offers when products are completed and ready for the field. Respondents had high praise for the laboratory's philosophy that training of trainers should be a top priority--persons who can deliver laboratory services and products without the laboratory's direct involvement. They endorse the laboratory's early efforts to build a national network of trainers who can in turn serve local needs without Portland staff involvement.

Evaluation

Not a lot of comment was offered about the evaluation aspects of the developmental R&D process except that several respondents noted there needs to be a great deal more follow through on long-term effectiveness after products are completed and installed in the field. Apparently many persons believe the laboratory would benefit from knowing how products become modified after installation and what effects accrue to teachers and youngsters who have been using laboratory products over a long period of time. Some respondents felt this kind of longitudinal evaluation should extend for a period of time--say five to ten years after the completion of certain major R&D programs.

Marketing

If marketing means improved dissemination or advertising to make the laboratory's products more visible, then respondents believe that NWREL should put more and more resources into it. Most believe there are many people in the field who have yet to hear of the laboratory's products and services.

General R&D Service Assistance

Most respondents agree the laboratory should strengthen its service effort so that it can meet client needs quickly and responsively. There were concerns expressed about the cost of laboratory services but most felt that with adequate explanation, clients would understand the relative costs involved.

In summary then, the laboratory has been able to apply eight critical R&D functions in various ways to accomplish its purpose. In the press of arranging for projects and programs and completing them, however, respondents did note areas of weakness that need to be strengthened. One of these relates to involvement of practitioners which was so important in the early days of the laboratory's growth. Some higher education respondents in particular felt they had been "left out" of the developmental process in more recent years. Others suggested the laboratory might do more to help local education agencies conduct their own R&D as education becomes more complex and resources scarcer. This would not mean a laboratory would transfer its capabilities to others, but rather show others how everyday problems can be approached in an R&D fashion with the laboratory as a resource.

HOW OTHER LABORATORIES REGARD "SPECIFYING R&D FUNCTIONS"

While they may not use exactly the same words to describe their approaches, all laboratories agree that using systematic R&D strategies is the key to their success.

Research

One laboratory director characterized his institution's approach to basic research as "following our nose and adding to the stockpile of information from which to draw help and resources in the developmental stage." All believe laboratories need a strong research capacity to use as they can

"to meet unfilled needs." One laboratory chairperson, the superintendent of a major school system, believes that most practitioners are so immersed in the "here and now" of their work that they need the theoretical understandings that come from basic and applied research findings. He would hope products would include theory as well as applications.

Development

The reason laboratories are so successful in research and development, said one director, is that they "leave something behind when they are finished." That is different from other R&D providers who "concentrate on basic research activities where the final result may be a large report gathering dust on bookshelves of little use to someone in the field." Laboratory directors and board chairpersons are unanimous in their belief that large-scale R&D programs are the lifeblood for the institution, providing the capacity to build and spinoff other kinds of work including new research, field services, dissemination, and implementation assistance. Yet, one director warned, the climate for large-scale curriculum-based R&D has changed now, forcing more modest efforts--particularly in the comprehensive approach to development that laboratories have excelled in.

General R&D Service Assistance

Respondents from the seven other laboratories were somewhat wary when considering problem-solving services for constituents. They tend to feel that providing services alone could become a rather stale activity if other R&D elements are not also maintained. One director noted that laboratories were not perceived of as service organizations in the mid-1960s. However, several respondents now look positively at regional service opportunities--particularly services that flow naturally out of basic research, applied research and development.

Implementation

At least one laboratory believes strongly enough in the "turnkey" concept that it has made a practice of spinning off not-for-profit corporations to carry on certain work.

Dissemination

All laboratories believe that dissemination and marketing functions are important activities. One director noted, however, that some products may sit around undisseminated for awhile and "that may be all right too." The time will come when that particular product may have great value; "it may have been too early, the time may not have been right."

In summary, the other labs believe that laboratories must continue to remain flexible organizations using the eight R&D functions as a reference point. They believe the wider community must understand that fixed time is a relative thing in R&D and that regional laboratories must beware of promising action too soon or releasing products too early but must hold true to some basic fundamental processes that occur using a systematic R&D approach. One laboratory director urged that new regional laboratories be wary of jumping into highly controversial areas or situations where their R&D mission might not be appropriate. Furthermore, he noted that R&D models are often very complex and that we need to constantly strive to make our models easier to use and understand.

There was whole-hearted agreement that a regional laboratory must always try to balance its R&D functions and never let one particular type of activity (e.g., research, development, service) dominate the whole organization. One director compared the three thrusts to a three-legged stool: if any one of the legs were to drop off, the stool collapses.

Responding to R&D Needs

To illustrate how the other laboratories approach R&D requests, each was asked to give some quick impressions of how their staff and/or board would respond to five hypothetical queries.

1. *Congress directs federal education officials to mount an immediate campaign to improve spelling skills of American youth. A Request for Proposals is distributed announcing a feasibility study to be followed by extensive media development and major work on teacher how-to-do-it materials.*

   Lab A: Yes, consider it seriously if it looks like a good chance to help states in the region. RFP would be referred to key staff across divisions and program lines to see if it looks feasible.

   Lab B: Wait and see what happens. Perhaps the lab could do part of the job, but don't get overly excited. This could be just another passing fad and the lab may not want to get totally wrapped up in such a cause.

   Lab C: Is this something our region needs as well as being a national problem? Does it fit within our mission? Is our organization capable of mounting such an effort? Who else will be competing?

   Lab D: Does this work look feasible within the available dollars? Do we have staff capability and availability? Does it fall within our defined mission? We definitely have the media capacity.

Lab E: Go for it.

Lab F: It would be a natural one for us, but the RFP would probably be screwed up and resources inadequate for the task. If it meant adapting what we've done, then we might respond.

Lab G: If this is also a regional concern, we will try to play a catalytic role, perhaps taking the initiative as prime contractor. If the RFP comes from NIE, we might submit an independent response.

2. *Several states in the region recently conducted their own assessment of student achievement and there was some careless handling of interim findings. They have wondered if the laboratory would develop some guidelines and training for state department staff and local educators in how to interpret assessment results and report them in reasonable fashion.*

Lab A: If the problem is held in common and doesn't look like it will vanish quickly, it's a good chance to help states.

Lab B: Yes, we've got some ideas about this and the staff with the expertise.

Lab C: Definitely yes. We would respond and possibly broker some assistance either internally or externally. This is an example of how we can apply R&D techniques to practical school problems.

Lab D: We would probably need to consider staff capabilities first and then hand it to our research director to explore.

Lab E: Go for it.

Lab F: Refer to another institution, say a university consultant. We could provide some back-up support.

Lab G: We have done similar things in the past, but have not actively sought this kind of business.

3. *The superintendent of a suburban school system called and asked if we could conduct a management study to suggest some alternative organizational patterns before they invest in a costly, new administrative services center.*

Lab A: The director felt this kind of request would have low priority. He would try to broker this request to someone else. "It's too small to get involved in." The chairperson, on the other hand, felt "it's good to do a few things like this to establish credibility and serve where you can."

Lab B: Yes, if the client really thinks we have capability to help, but there are many other organizations that could do it better.

Lab C: Staff look upon the task as a test of lab's ability to serve the field by using their R&D capacity. The board director, however, would not recommend involvement.

Lab D: We would try to broker this request--perhaps to a retired superintendent who "knows the ropes."

Lab E: Job it out to someone else.

Lab F: Broker it to other R&D performers.

Lab G: Now we would probably back off and broker it elsewhere. That doesn't mean it isn't appropriate for a laboratory to do, though.

4. *One of the large intermediate service units in a member state says that the districts it serves have been wondering how to assess public attitudes about the use of low-cost transistorized calculators in schools. They have asked if we could help with such a survey.*

Lab A: Again, this would be a low priority for us to jump into and we would consider it a brokerage task. If we were to get involved, it would require some staff capability and lots of time and the available dollars would probably be inadequate. We would likely say "forget it."

Lab B: We would try to get them to look at the literature themselves and then perhaps refer them to some other professionals familiar with this problem.

Lab C: Again, we would be interested in this kind of service particularly if we could demonstrate how R&D strategies can be applied in the resolution of the problem. Small states particularly have difficulty answering questions like these within their own state agencies or higher education institutions. A lab can conduct a useful field survey here using our R&D capacity.

Lab D: Yes, this is the kind of thing where we can lend a hand. In times past, we have helped other agencies, in fact, take the next step in the R&D cycle they began for themselves.

Lab E: Help them with their problem, particularly given some of our work has been in this area.

Lab F: We'd look at it carefully since it touches on work we've done before. There's probably not enough money to do it right, though.

Lab G: It would depend on whether we had any expertise in that area. We are not a job shop or service center, however--rather, we hope we're problem-centered.

5. *One state's employers and labor leaders agree it's time they join forces to fund an experimental job placement coordinating center. Local educators are enthusiastic but don't seem to have the time, money, or political know-how to pull the idea together.*

Lab A: Yes, we would be interested because of the nature of our organization--and if there's some know-how already on staff and if this will eventually help local education agencies in the region. The time to do it is critical, though. We would be concerned about spending a lot of time on small contracts like this.

Lab B: We would be nice to the callers and try not to offend them. However, it looks like a hot potato and a good problem to broker elsewhere. If it's something I or someone on our staff really wanted to do, fine.

Lab C: Beward of the political implications of this. If state and local educators are interested and our organization can make a contribution with available expertise, then we would proceed.

Lab D: We would avoid getting involved unless the educational implications were clear and the emphasis is definitely on school to work problems. The laboratory cannot afford alienating any particular group.

Lab E: Try to find someone else who can step in and do it.

Lab F: Would avoid. It's not our bag. Would refer to existing industry-education council.

Lab G: We try to be sensitive to problems like these, to take risks. To ignore would be a mistake, but we would exercise discretion.

Build Constituency-IV

What about the people who wanted it in the first place?

As the world of educational R&D turns, it is easy to lose sight of original laboratory purposes and the people who wanted it so. Reputations for quality work are built on an attitude of responsiveness and an ability to deliver and follow through on commitments. Qualities that people remember are success in using the R&D product (e.g., impact on learners, ease of installation), personal relationships with laboratory staff, delivery on time, appearance of the product, and its relevance to their needs and self interests. The ability to maintain a range of R&D services in a region is also strengthened when a laboratory can tie into a network of R&D performers--often working jointly to solve national problems.

The mark of success for a laboratory is when someone wants your services even during a budget crunch.

--Assistant superintendent,
suburban school district

A laboratory must not ignore the resources which it can tap within its region. Keeping in contact with persons involved at all educational levels--as sources of ideas, as part-time staff, as advocates of lab products--is key.

--Dean, college of education

Do what you do well.

--Associate professor of education

Apathy created by lack of constituent involvement is as bad as outright aggression.

--Professor of education

Somebody in every school district should be an advocate of the various ways their region's laboratory can influence and change educational practice.

--Elementary school principal

To know that people in the region and across the nation believe in your work is a pleasant feeling. The time to worry is when the calls and letters taper off and requests for help are directed elsewhere. Neither has happened at NWREL; indeed, the volume increases with every passing year.

Reputation

The test of whether R&D processes work is how well the clients like what you do. Three immediate concerns NWREL managers share are: (1) is the content of the highest possible quality, (2) was the work delivered on time and (3) was it performed within cost parameters. Questions NWREL staff and clients usually ask together are: (1) does the product meet the objectives laid out initially and (2) does the work go beyond minimum expectations to demonstrate NWREL's commitment to comprehensive information gathering and analysis.

Staff use a variety of management tools to make sure they deliver on their R&D promises: detailed timelines for each work task, quarterly cost progress reports, monthly budget status printouts, regular staff meetings, and interim reports to clients.

On completion of a contract--say a third-party evaluation contract for a local school system--NWREL also remembers its working commitments as a regional R&D institution: emphasize the positive things a client has going while still being honest about the facts. When a final product is ready, for example, NWREL will stand by to present and explain findings to the agency's board, if appropriate. Such second mile efforts--even if not specified in the contract--illustrate NWREL's philosophy that everyone needs to understand R&D outcomes as clearly as possible. Implications for educational practice must be spelled out fully.

What has been more difficult for NWREL to perform after contracts are closed, however, is a follow-through several months or years later to determine what happened as a result of a particular R&D intervention. This is a particular problem in large-scale programmatic efforts where materials and procedures move into field usage and are adapted to local conditions. Changes that occur over time are rarely documented so revisions in the original product might be made. Similarly, NWREL has not been able to "package" the results of its smaller service efforts so that other potential users might benefit from the same problem-solution.

Responsiveness

An unwritten rule at NWREL is to respond quickly to any request received or any visitor who happens by. Despite the fact letters or calls may ask for information unrelated to current work at the laboratory, or despite the fact visitors may come as staff are trying to meet an immediate deadline, NWREL takes time to provide information and help. Examples of "drop in" visitors include:

- Folks attending a convention in town who want to "see the lab."
- School district or other agency personnel on a fact-finding mission to see what's happening in the Northwest in a particular content area (e.g., computer technology).
- Publishers interested in laboratory materials and long-range plans.
- Teacher candidates from nearby colleges and universities who want to use lab resources, particularly the Information Center.
- Teachers and staff working on task forces who want to "pick the brains" of lab staff in certain specialty areas (e.g., design of a brochure for a community involvement project).
- Foreign educators trying to get a sense of educational practices in America.
- University graduate seminar group on a field trip.

Because external requests like these can be very time-consuming, NWREL has maintained an office over the years to handle "institutional communications." Visitors receive an overall orientation to laboratory structure and programs and are often referred to specific program and project staff for follow-up details.

A new Office of Educational Services created in 1975-76 has received growing attention since its creation, thanks in part to the use of a toll-free incoming telephone line which allows outsiders to let their requests be actually heard and referred almost immediately. The sampling of services provided by this office during the second quarter of FY 77 is shown on page 134.

An internal service arm of the laboratory that receives many external requests is the Information Center. In addition to offering its resources to persons who wish to use materials in-house (for instance, graduate students doing research, a local teaching wanting to use ERIC), the Information Center also provides certain services at cost. (See page 193 for typical inside and outside computer search requests.)

RECORD OF COMPUTER SEARCHES

NWREL Information Center
September, 1976

SEARCH	NWREL STAFF REQUEST	EXTERNAL REQUEST
Early Assessment/Reading	R&D Utilization Project	
Bilingual Ed/Assessment/ Curriculum Development	Center for Bilingual Education	
Construction/HUD	Center for Bilingual Education	
Special Education/Hawaii	Hawaii Special Education Project	
Speech Pathology/Audiology/ Hawaii	Hawaii Special Education Project	
Orthopedically Handicapped/ Nurses	Hawaii Special Education Project	
Retardation/Severely/ Multiply-Handicapped/ Career Education	Hawaii Special Education Project	
Emotionally Disturbed/ Programs/Hawaii	Hawaii Special Education Project	
Citizenship Education		Citizen, Portland, Oregon
Gifted/Career Education, Community Participation	Career Education Program	
Cocurricular Activities/ Junior Colleges		Mt. Hood Community College, Gresham, Oregon
Energy/Heating and Cooling	Division of Educational Services	
On-Line Registration		Idaho State University
Adam County, Colorado	Educational Services	
McGuffey Readers		Lake Oswego Public Schools, Lake Oswego, Oregon
Sex Stereotyping		Citizen, Portland, Oregon
Life-Long Learning/ Career Change	Career Education Program	
Teacher Education/ Career Education	Career Education Program	
Early Childhood Education/ Program Effectiveness		Portland Public Schools, Portland, Oregon
Staff Development		Tigard School District, Tigard, Oregon
Management Systems/ American Industries		Western Amids, Inc., Beaverton, Oregon

The Office of Marketing and Dissemination is another "front line" contact between NWREL and its constituents throughout the region and nation. Every day brings a variety of mail and phone inquiries about products and services that are either handled on the spot or referred to appropriate program or project offices. A profile of a typical month's interactions in this office is found on page 195.

Professional organizations and educational agencies know that NWREL is a good resource to call on when arranging meetings and conferences. Many is the time when the lab hosts small outside groups at no charge in its conference room facilities (e.g., the Oregon State Board of Education held a regular monthly meeting in lab facilities to help familiarize the board members with laboratory operations). Occasionally, laboratory facilities are the site of special exhibits or art shows from educational institutions.

Laboratory staff are frequently invited to appear at conferences and conventions or in college classes as resource persons because of their acknowledged expertise in a given area and because of their interpersonal skills in doing an effective job. Laboratory staff have also conducted for-credit college courses either at the headquarters or on nearby campuses. It is not uncommon for staff to take an active role in local communities where they reside--serving on school committees and as members of civic or church groups--all of which helps NWREL become recognized as a valuable educational resource.

Appearances

While reputations are seldom built on outward appearances, it is still true that NWREL's image has been enhanced by certain standards it has maintained over the years:

1. Publications that consistently look nice, thanks to a Media Center that strives to make sure all printed matter meets high quality criteria.

2. A businesslike approach in correspondence that strives to make sure letters are answered as quickly and as error-free as possible.

3. A distinctive logo that has identified NWREL on correspondence and on publications since 1967.

4. Facilities that are contemporary--that communicate a businesslike feeling of efficiency without offending cost-conscious clients.

CUSTOMER INQUIRIES

Office of Marketing & Dissemination
March, 1977

State, Federal Agencies	13	Total letters**	129
Educational Agencies, Organizations	12	Total calls	20
Schools, School Districts*	33	Total visitors	5
Colleges, Universities*	46	TOTAL	154
Others	49		
Intermediate Education Districts	1		
TOTAL	154		

Arizona	1	New York	9
Arkansas	1	North Carolina	2
California	20	Ohio	3
Connecticut	3	Oregon	18
Florida	3	Pennsylvania	6
Hawaii	1	South Carolina	2
Illinois	6	Tennessee	2
Indiana	1	Texas	4
Iowa	4	Vermont	1
Kansas	3	Virginia	1
Kentucky	2	Washington	6
Maine	1	Washington, D.C.	2
Maryland	4	West Virginia	1
Massachusetts	3	Wisconsin	6
Michigan	8	Wyoming	1
Minnesota	2		
Missouri	1	Canada	3
Montana	1	Other non-U.S.	5
Nebraska	1		
New Jersey	11	Origin Unknown	5

**Includes individual teachers and administrators.*
***Does not include sales of publications handled by order blanks.*

Networking

One reason NWREL is often able to do a good job in responding to regional needs is its participation in the network of R&D performers nationally. Since participating with other laboratories and centers in shaping the Council for Educational Development and Research (CEDaR) in 1969, NWREL has played an active role in promoting the cause of labs and centers by trying to build a comprehensive system that facilitates the sharing of information between R&D institutions and constituents around the nation.

In addition to CEDaR, there have been supplementary alliances with labs and centers to help diffuse and install certain products and services. For example:

1. NWREL has worked jointly with the Far West Lab, CEMREL and the Wisconsin R&D Center on a unique dissemination effort to help regional users examine and install the products that emerged from the four participating institutions.

2. On at least two occasions, NWREL has helped field test products developed by other labs and centers to see how well they work in Northwest settings and vice versa.

3. NWREL is presently working cooperatively with three other labs involved in Experience-Based Career Education to "broker" the models developed by all four. Staff in each lab are trained to do two things: provide a brief overview of each lab's model and follow up with specific training in either or all versions if contracted to do so.

4. NWREL encourages individual and institutional memberships in various professional associations related to or interested in R&D.

5. NWREL products and services are displayed at conventions and conferences both on the regional and national level as part of its marketing efforts. Joint displays with other R&D institutions are not uncommon.

HOW REGIONAL STAKEHOLDERS FEEL ABOUT "BUILDING CONSTITUENCY-IV"

"The trick is having people who want your services even during a budget crunch." That response is typical of how constituents in the Northwest region regard NWREL and its reputation for responsiveness.

Several interviewees expressed enthusiasm for NWREL's openness and availability to help when needed. They appreciate being asked to come and work side by side with R&D staff. Several were concerned the laboratory might become so bureaucracized that it loses touch with its constituents in the region. They appreciate the warm and trusting relationships they have enjoyed with several laboratory staff members in the past.

One thing that really stands out in the minds of a few respondents is the laboratory's ability to "clean up" the educational jargon they sometimes find hard to cope with. Several have been impressed by NWREL's ability to report and document educational processes clearly and effectively. However, some feel at times the laboratory has become too sophisticated and perhaps too slick or gimmicky in its materials.

A good number of respondents believe the laboratory should be more vigorous in its efforts to "sell" itself. Many felt that once products are developed, they do not hear about availability. One said, in fact, "apathy is as bad as aggression when it comes to building solid relationships with constituents." Others suggested that the laboratory should "explain itself" on college compuses or in state departments of education as a way to provide in-service training to staff in those institutions.

A number of respondents believe that the laboratory's entire membership needs to be reminded of how to access the system. "Some people believe that R&D is for the exception," said one respondent, "when they're really the rule and don't know it." Some respondents believe that the laboratory must continually work on its protocol with various agencies, knowing whom to access at the right time. They fear that some laboratory staff can become aloof when working with individual clients.

High praise was given to the laboratory for its ability to handle work in an extremely ethical fashion. They also appreciate the lab's willingness to stand behind its work and be accountable for results. Some would like to see the laboratory follow through, however, and let people know what happened as a result of a particular project or program. They would also like to see how needs identified as part of priority-setting are related back to work that was actually done.

On the matter of networking, while agreeing that the work in labs and centers needs to somehow be better coordinated, several respondents are concerned that the laboratories have become arms of the National Institute of Education. They worry that federal priorities will dominate regional and local needs. Curiously enough, the only strong variation of responses among the member states in the region came from Oregon practitioners who tended to believe that Oregon was being overlooked in favor of the needs of other states and territories. The quarterly display of contracts on page 132 does not support that concern, however.

HOW OTHER LABORATORIES REGARD "BUILDING CONSTITUENCY-IV"

Respondents from the other laboratories believe that while it is important to maintain a good reputation so that a solid institutional base is established, there are limits on how far you can go. They agree it is important to let people see how R&D solutions are better than other kinds of solutions. But to provide that leadership, "you can't bend over backwards to accommodate every visitor or request that arrives."

One board chairperson was concerned, however, that labs can easily become isolated from their constituents. As a college dean himself, he notes professors and staff find collegial support for what they do on campus. Labs, on the other hand, must rely on staff contacts in the field for reinforcement. Respondents do agree that in building a constituency, it is important for laboratories to maintain strong relationships with agencies such as state departments who are the primary gatekeepers. One director preferred to modify a premise that "laboratories should always make other agencies look good" this way: "Never make them look bad." On the matter of public relations "tools," one director warned "nobody is interested in your second sentence," so be sure your communications are clear.

As for establishing a record for delivering materials or products on time just to meet deadlines, respondents from one lab felt that dependability and reliability are better ways to judge the worth of a particular R&D product or process rather than how speedily it is done. This becomes part of the in-service training of clients a laboratory must provide, they pointed out.

Networking is of high interest to the other laboratories--particularly in drawing on personnel, products and outcomes from other performers. All persons agreed that greater attention needs to be given collaboration and cooperation despite regional and organizational differences. One director yearned for the days when more inter-lab sharing was commonplace. A director and a board chairperson both felt, however, that two labs should never be working on the same things. "Perhaps there should be ways of sorting out who does what so that overlap is reduced, while still recognizing that some problems do have regional variations that can be addressed."

One laboratory chairperson, on the other hand, believes that the networking idea should include the notion of "feeding forward" regional needs so that they can be intertwined for national planning purposes. Disagreeing on specialties for certain labs, he suggested that all labs should occasionally be given the same problem to solve to see if there are not different ways of attacking a similar issue.

One other laboratory reported a problem that rang true for the NWREL respondents as well: it is always difficult to assure that all states in a region have equal access to R&D programs, projects and services and that one state is not getting more service than another.

The issue was well summarized by one director who said, "a laboratory must continually examine how well it is relating to its region and to its national clients. An R&D service program can be highly useful and mutually supportive when combined with programmatic R&D. You can have one without the other, though--and our challenge is to balance these demands carefully so the region feels we are being responsive."

EPILOGUE

During an NIE-sponsored workshop for laboratory directors on May 4-6, 1977 a portion of time was allocated for consideration of this study with participants also invited to review this draft and return their comments afterward. NIE staff also solicited reactions at the workshop to a series of issues and concerns that were then emerging as the Institute planned for longer-range institutional support and a renewed emphasis on regionality. Based on those discussions, general planning considerations for new laboratories are summarized below.

1. A regional laboratory must be able to perform in the following ways if it is to be distinguished from other R&D performers:

    - Demonstrate the capacity to conduct large-scale programmatic R&D that is responsive to national and regional priorities.
    - Demonstrate the ability to convene a wide range of individuals and organizations on neutral turf.
    - Demonstrate a commitment to the strengthening of educational R&D by demonstrating R&D skills to practitioners.
    - Demonstrate a staffing capability that draws on an essential core of skilled R&D managers and specialists, adding others as needed.

2. The service capacity of laboratories varies as the needs and impetus from regions vary. The key resources are time and dollars. Large-scale programmatic R&D requires time; problem-specific services, even if spin-offs from programmatic R&D, can be costly too. A laboratory must work with regional constituents to assess how responsive it can be given time and dollar parameters. The laboratory's board must take responsibility for defining these limits.

3. There is new hope for regional responsiveness given NIE's willingness to consider a services component in long-range planning. Accountability procedures for monitoring how federal dollars can be applied in state and local R&D problem-solving will vary according to whether needs are long-term and based on futures planning or whether they are short-range and designed to help educational agencies deal with immediate R&D problems.

4. A regional laboratory must remember there are some problems in every region that will never be addressed unless a laboratory takes the initiative. Wise use of laboratory resources often attracts additional input from state and local sources.

5. A laboratory governance structure that is truly responsive and "proactive" is the best mechanism for sensing needs in a region. Needs analysis is an interactive process, not one that can rely on one kind of data alone (e.g., a paper and pencil survey).

6. In defining its mission, a regional laboratory must continually reassess how far it should push or maintain the status quo, how far it should go in breaking new research ground or build upon the storehouse of existing knowledge, how quickly it can respond to problems without endangering ongoing R&D, how much it should try to do itself and how often it should share some of the load with others.

7. A regional laboratory should not become overly-dependent on one client or client group. That is, a laboratory will have difficulty if it tries to maintain a viable organization on small, problem-oriented service contracts alone so that a long-range mission to perform programmatic R&D is weakened. Likewise dependence on a single agency for funding is also difficult if that agency's coffers run dry.

8. A new laboratory must assess the existing political realities in a proposed new region very carefully by identifying who its clients are and then inventorying available R&D resources.

9. Governance is the most important reason for defining a region. State education agencies must be represented on boards but if a state desires to be involved in the governance of more than one laboratory, that is fine. It is better for whole states to be involved than for parts of states to be split between laboratories.

10. Planners for a new laboratory should deemphasize concerns about geographical access and recognize that "psychological access" may be more important: Will people feel comfortable approaching you? Will they feel you have something useful to offer?

11. When considering the formation of a new regional laboratory, invite states interested in participation to respond. The choice must always be left to states. Social, cultural and physical characteristics are important, but compatibility, mutual understanding and respect will be deciding factors in the long run.

12. A regional laboratory should be encouraged to maintain a range of out-of-region linkages. Such ties are two-way in nature: bringing ideas and resources into the mainstream of laboratory work from around the nation while spreading the impact of laboratory R&D beyond a region through activities like field testing and dissemination.

13. With a ten-year history of operation, existing laboratories offer useful models for handling business, personnel and field relations functions, to name a few. Packaging and sharing these insights will make the work of new laboratories a lot easier.

14. Staffing a regional laboratory requires a careful mix of persons with intellectual skills, management skills, content-specific or substantive skills, and interpersonal skills. Individuals should be sought who can maintain credibility and stability in spite of the ambiguity that marks a laboratory's environment.

15. NIE and the laboratories might both benefit from the creation of on-site institutional monitors who would represent the Institute's interests and provide liaison between lab staff and program offices in Washington. NIE program unit staff would thus be freed for long-range planning and integration of R&D findings from its national network of contractors of which laboratories are a significant part.

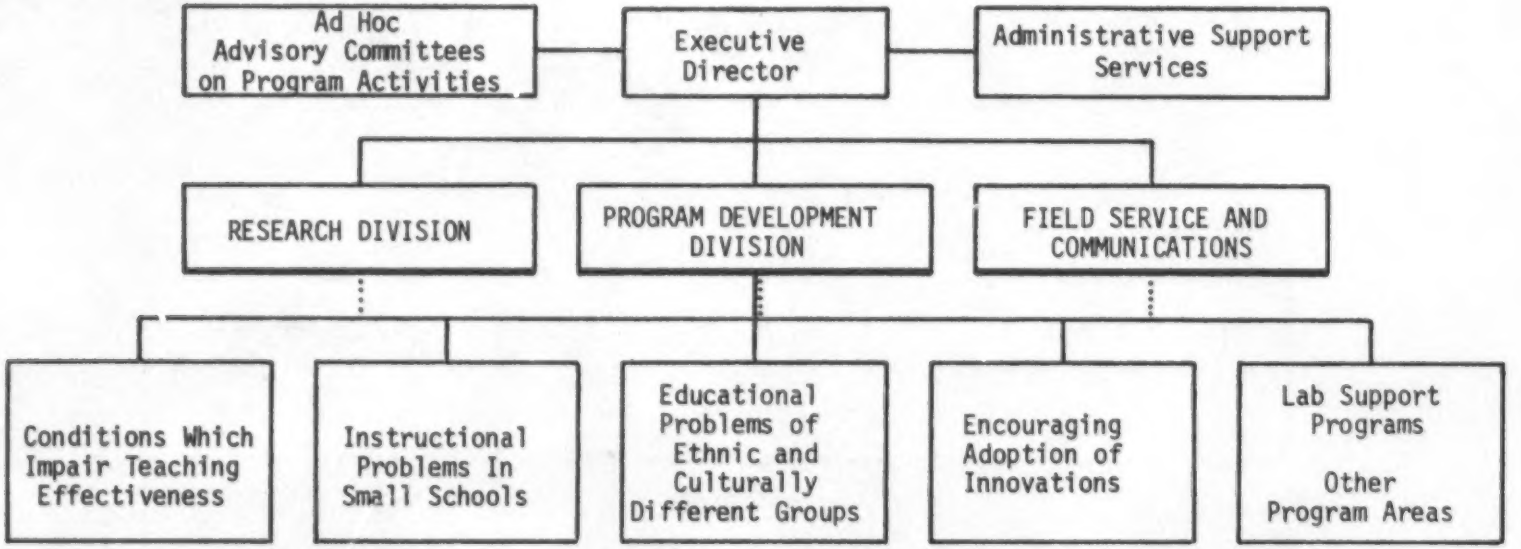
16. Laboratories use their management fees and overhead cost structure to maintain several vital functions, such as retention of key staff between contracts, resource development, dissemination, information services, and so forth.

17. If a regional laboratory drops below one million dollars in annual revenues it will be difficult to sustain a viable organization. Programmatic R&D and minimal institutional support services require a sizable chunk of dollars. After its initial shakedown period, a new laboratory will need a three million dollar minimum budget to do a credible job.

18. Laboratories will work more closely together as a network of R&D performers if given incentives to do so. Institutional funding rather than competitive procurement is one step in that direction. Self-interest and cooperation are not contradictory. More programs like the R&D Exchange and Training of Women and Minorities in R&D are useful in assuring interinstitutional planning. The Institute and laboratories alike will benefit from harmonious relationships built on a spirit of trust.

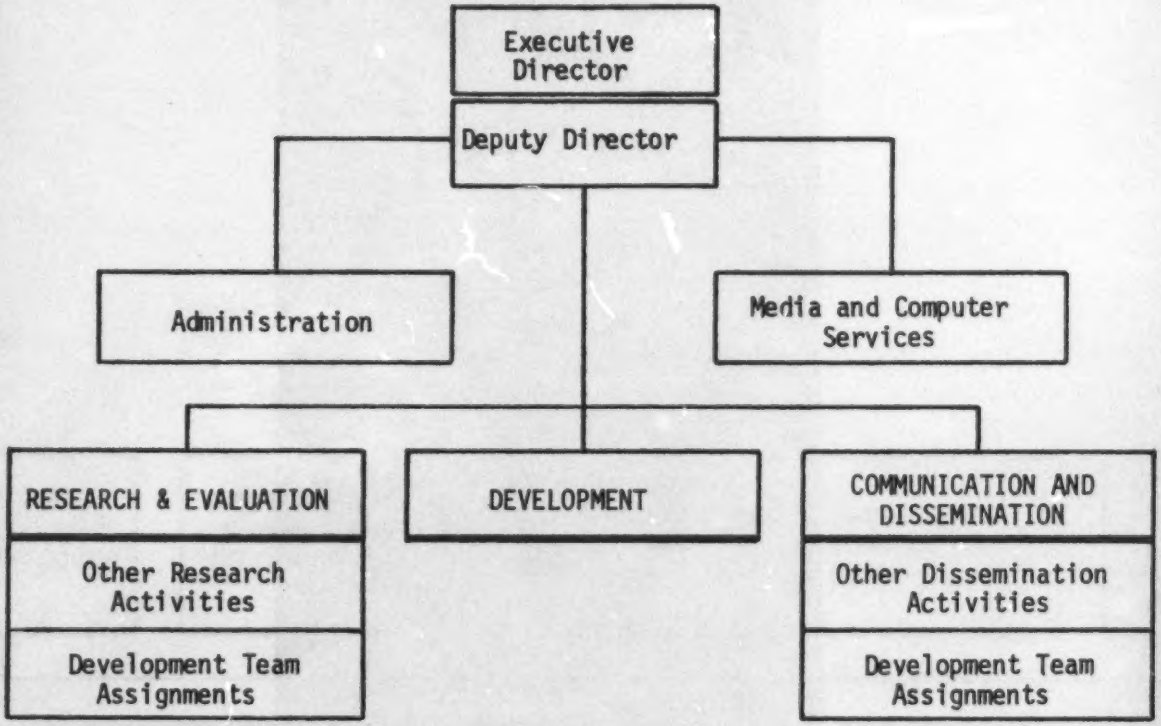
ANNUAL ORGANIZATIONAL CHARTS

1966* ORGANIZATIONAL CHART


Ad Hoc Advisory Committees on Program Activities
Executive Director
Administrative Support Services
RESEARCH DIVISION
PROGRAM DEVELOPMENT DIVISION
FIELD SERVICE AND COMMUNICATIONS
Conditions Which Impair Teaching Effectiveness
Instructional Problems In Small Schools
Educational Problems of Ethnic and Culturally Different Groups
Encouraging Adoption of Innovations
Lab Support Programs
Other Program Areas

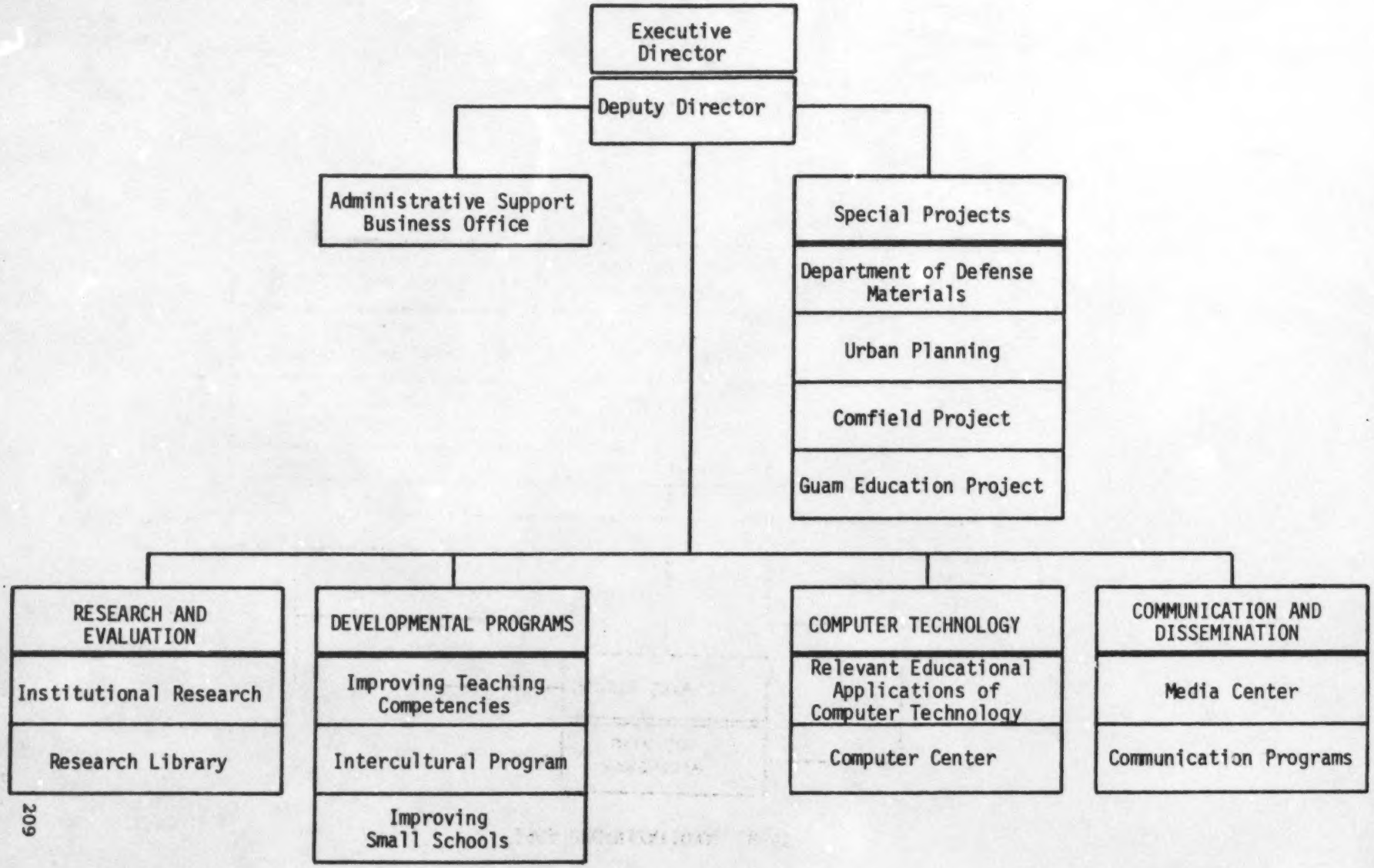
*As of 8/66

1967* ORGANIZATIONAL CHART



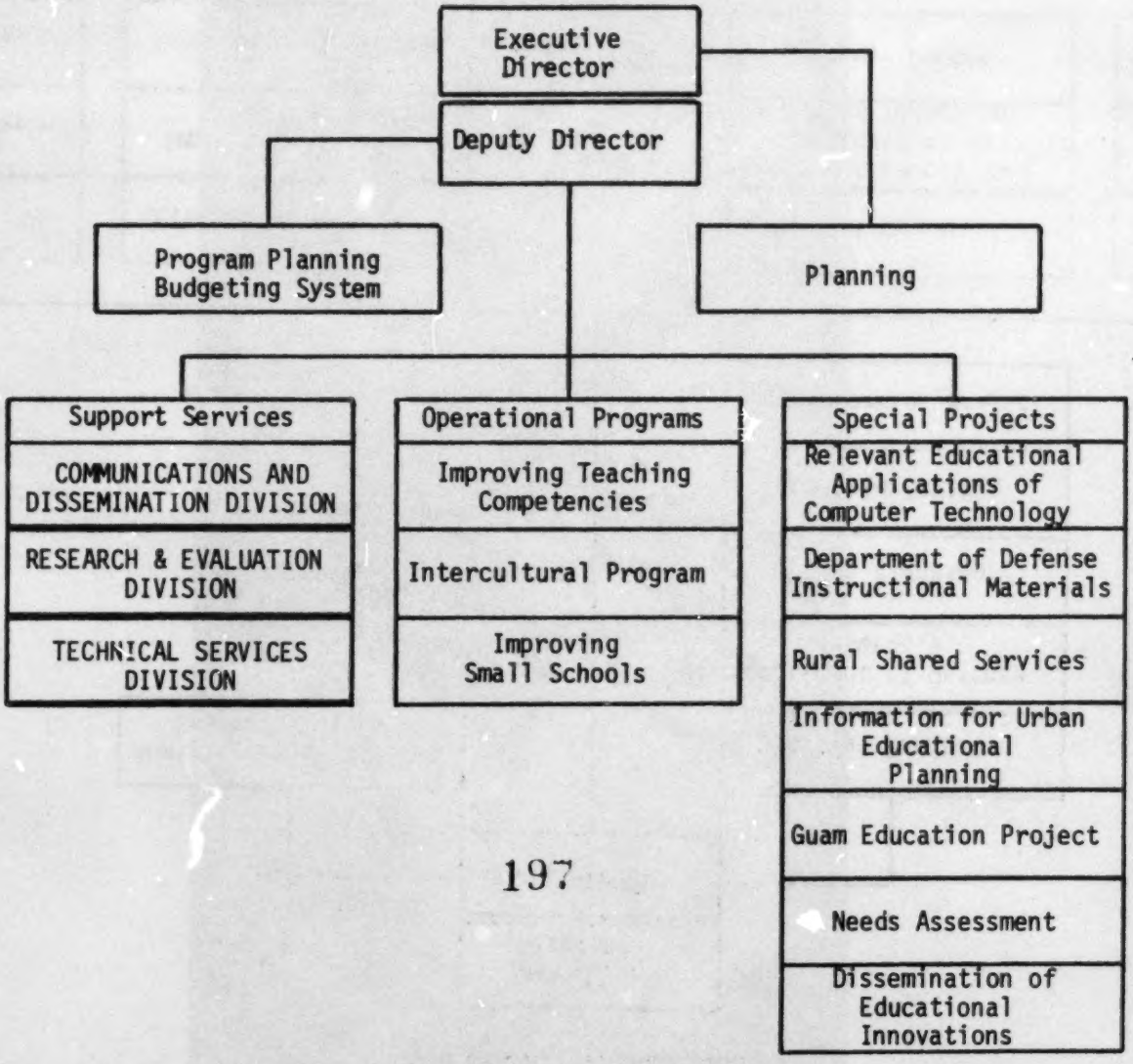
*as of 5/67

1968 ORGANIZATIONAL CHART

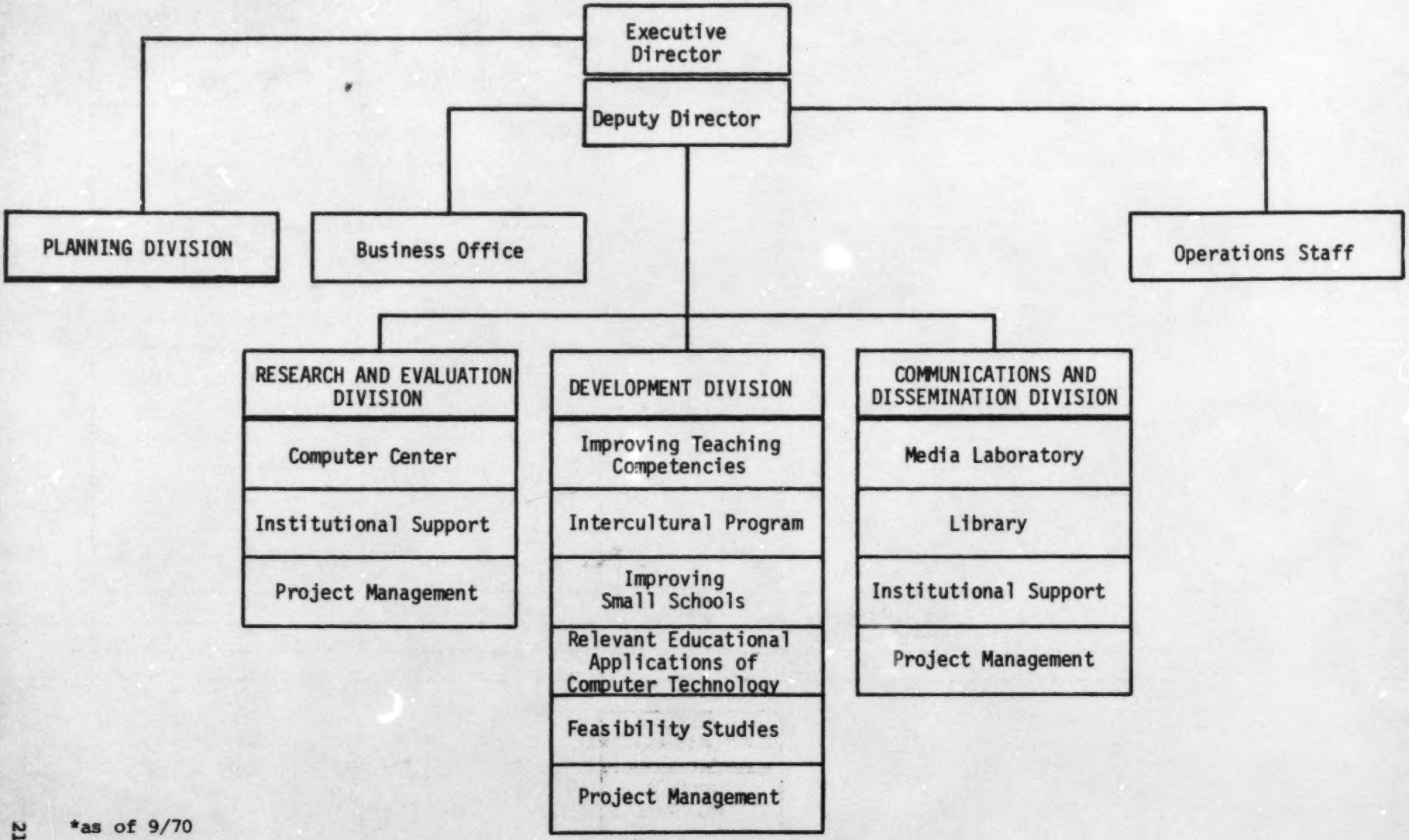


209

1969 ORGANIZATIONAL CHART



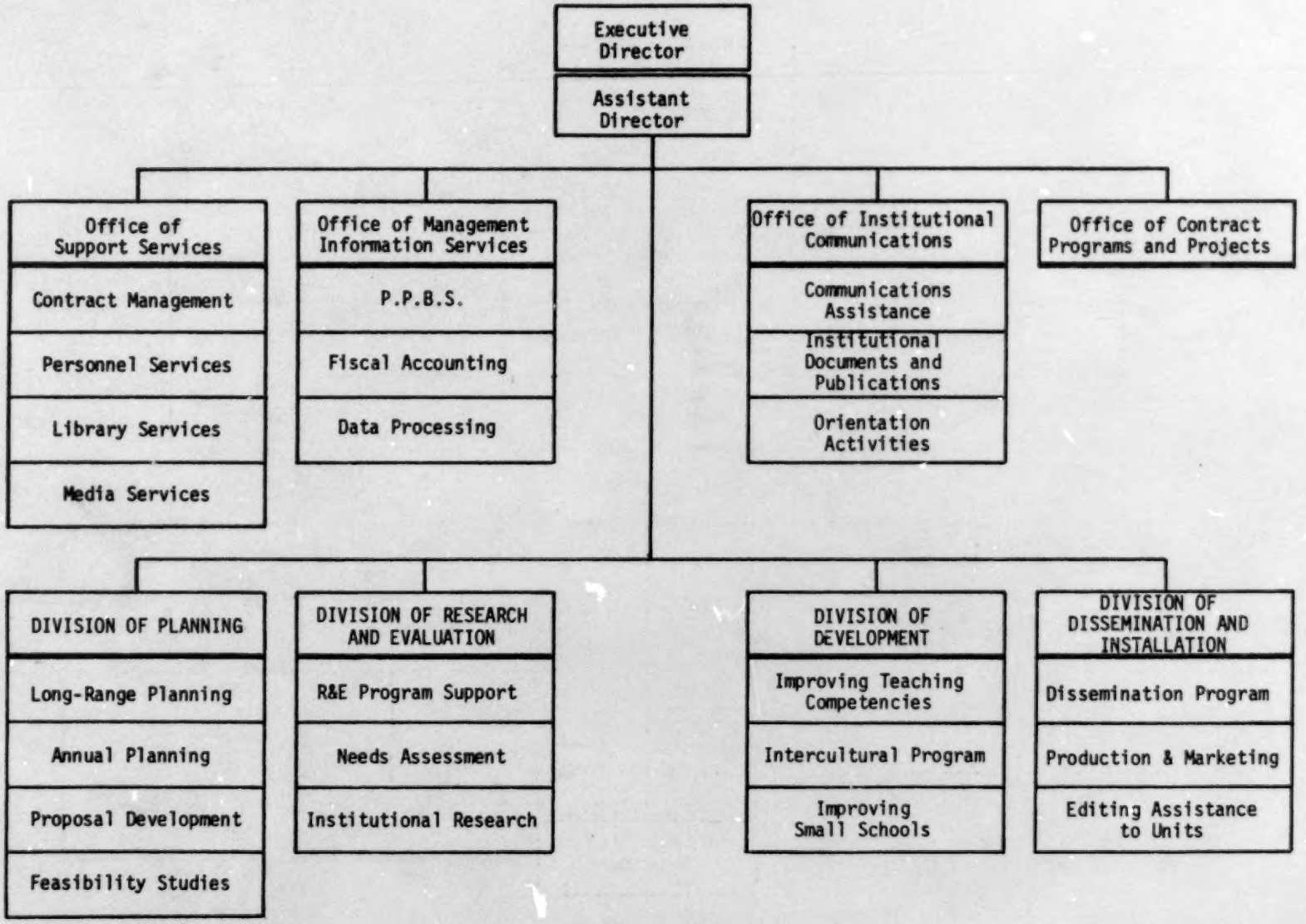
1970* ORGANIZATIONAL CHART



*as of 9/70

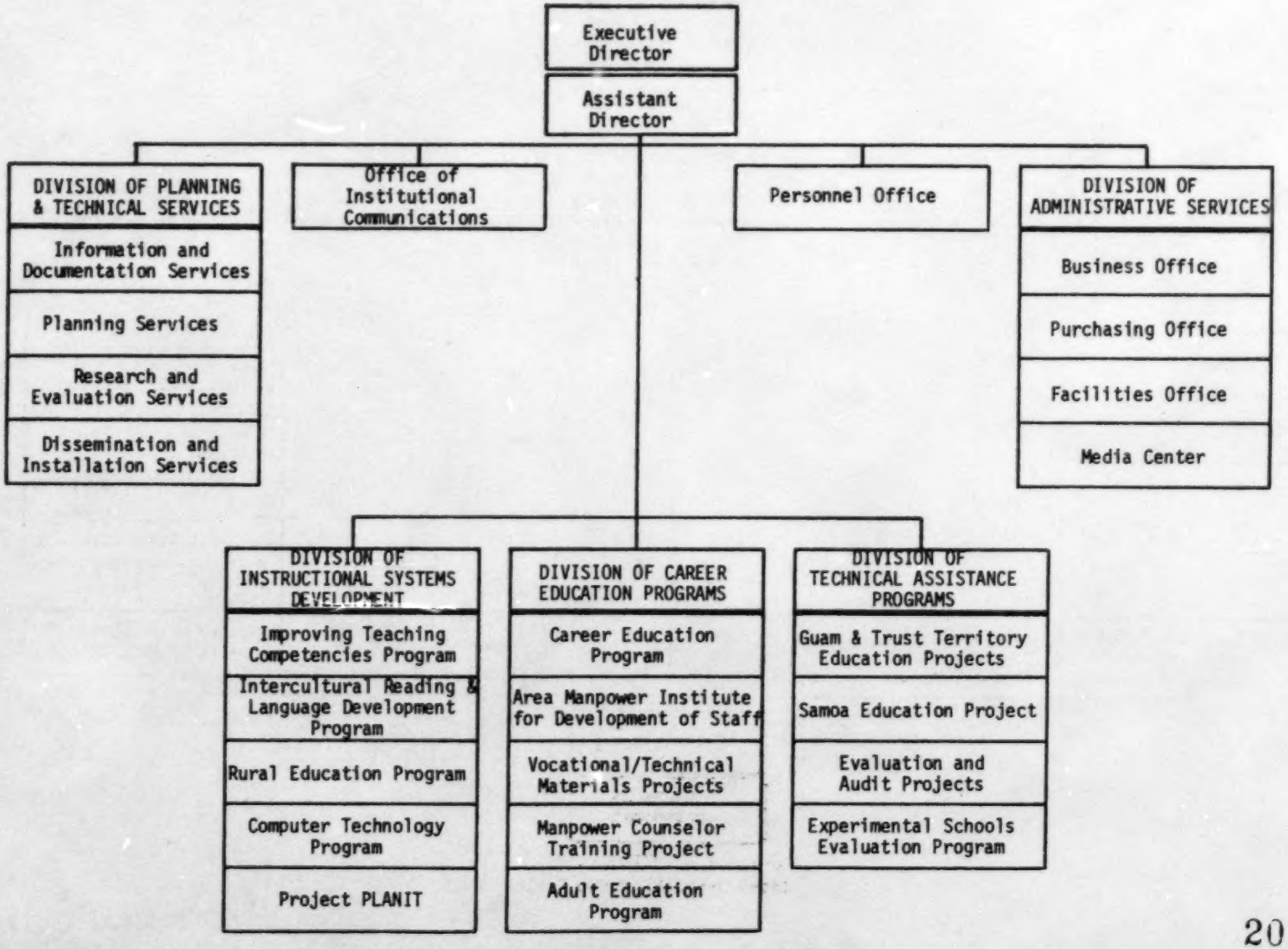
211

1971* ORGANIZATIONAL CHART



*as of 8/71

1972 ORGANIZATIONAL CHART



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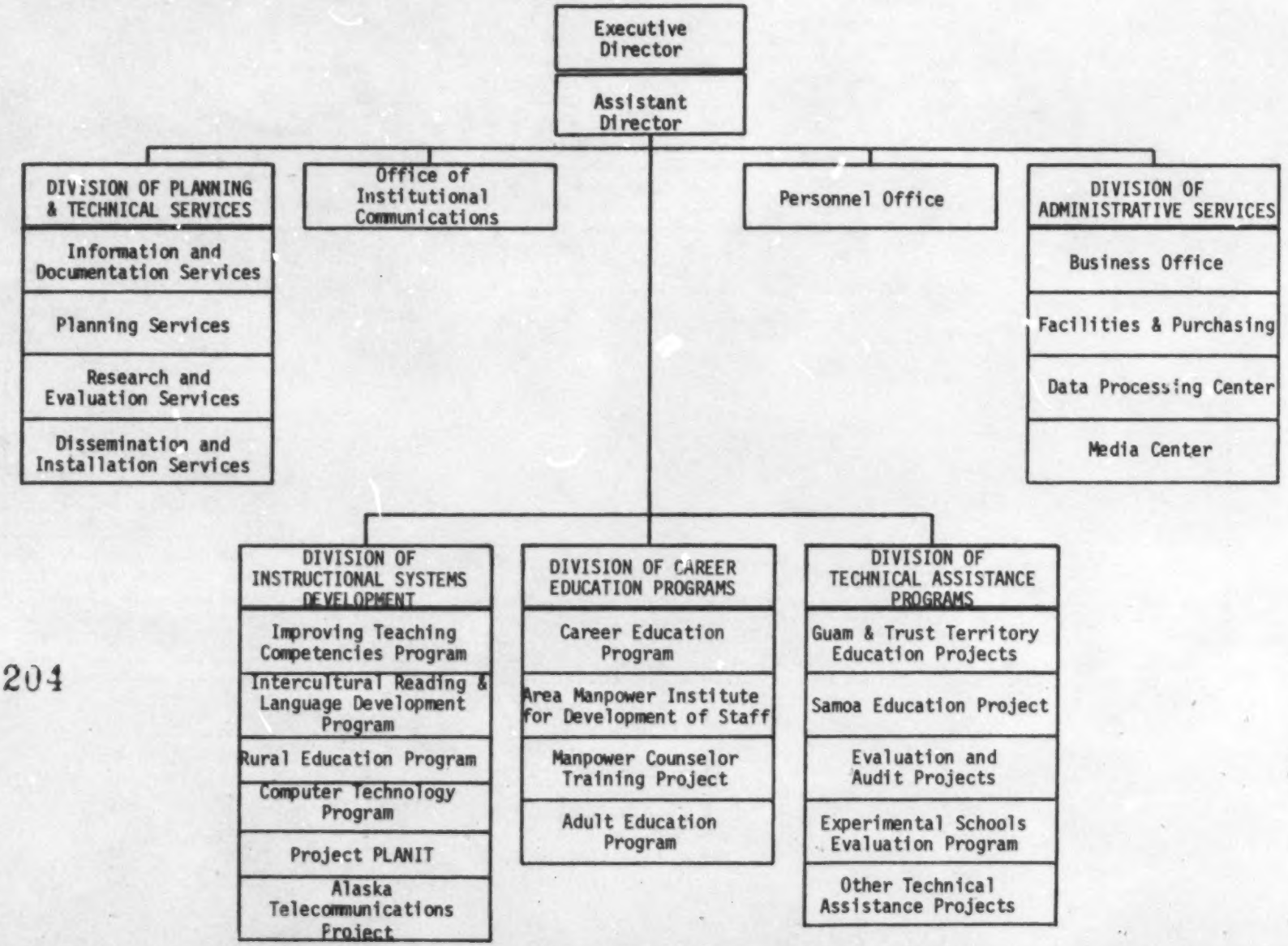
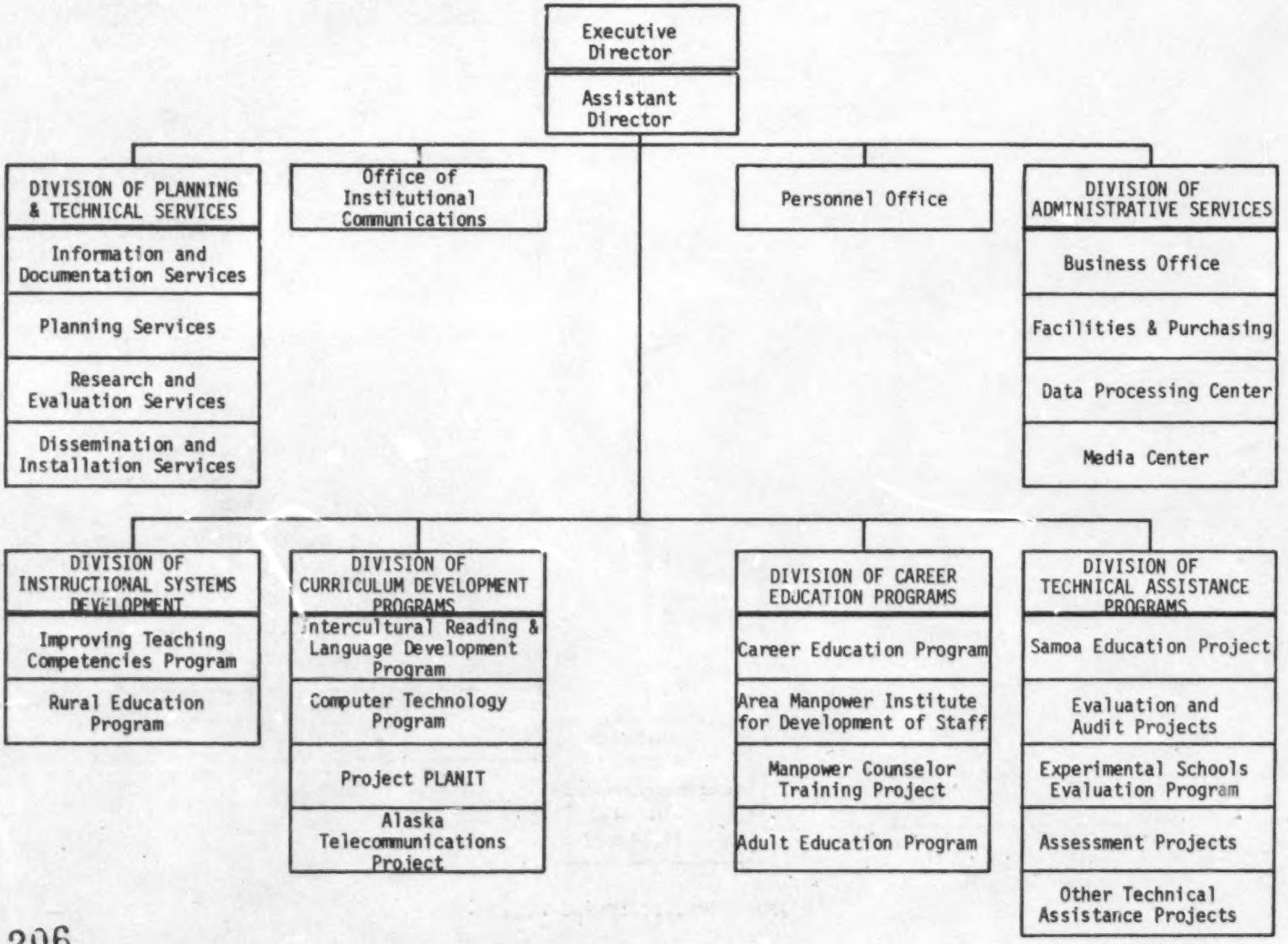
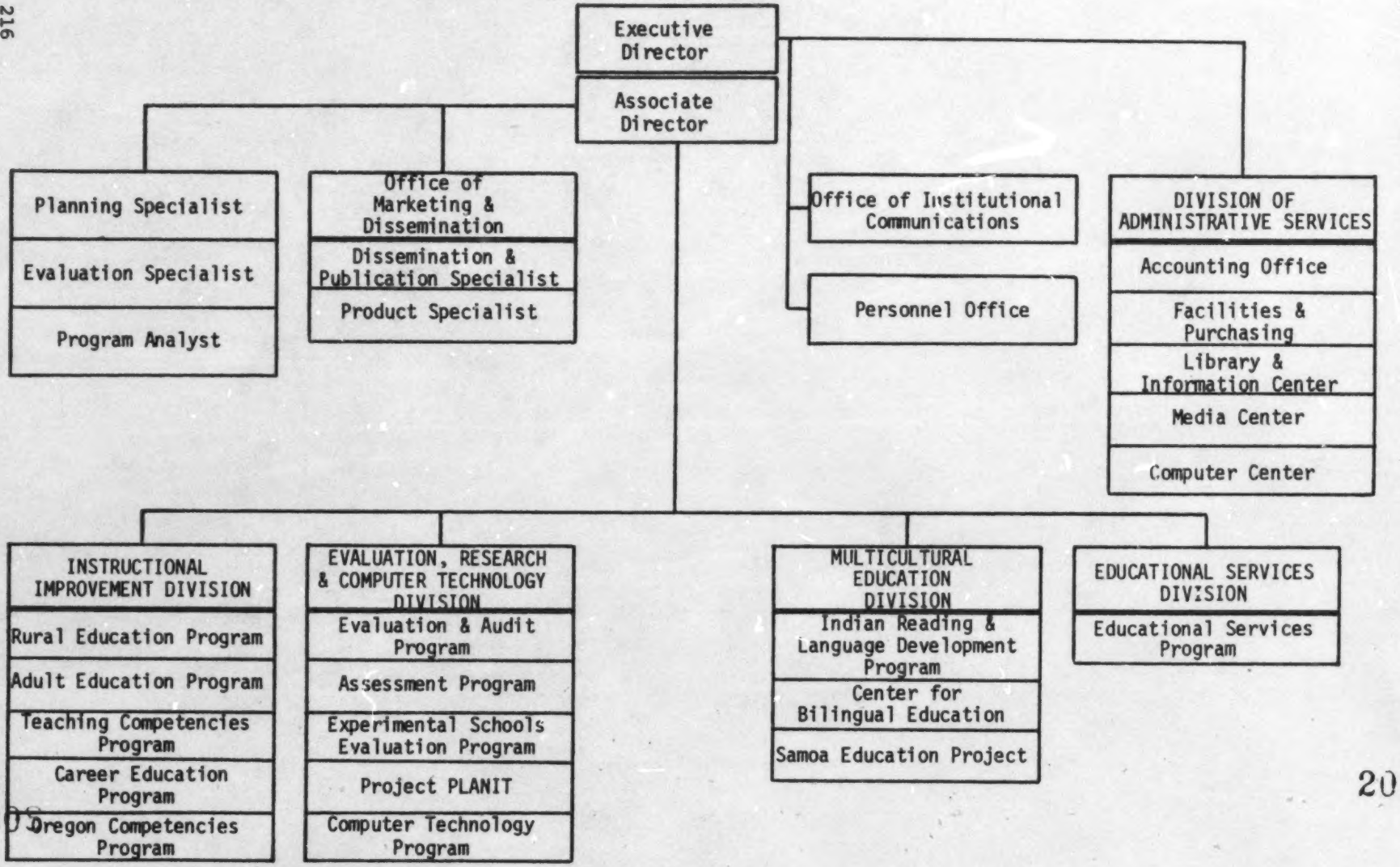


1974 ORGANIZATIONAL CHART

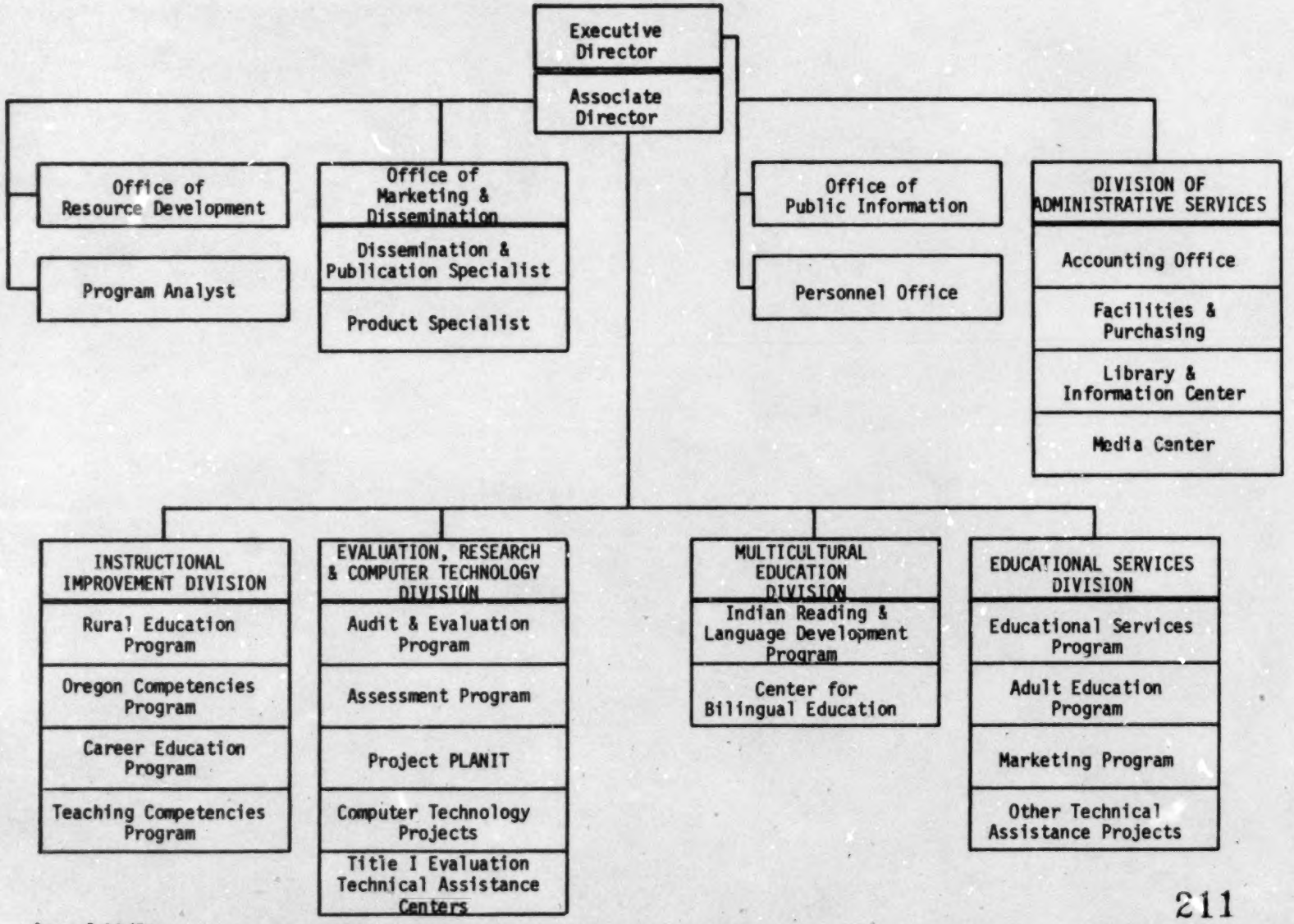


1975* ORGANIZATIONAL CHART



*as of 3/76

1976* ORGANIZATIONAL CHART



*as of 10/76

ANNUAL MEMBERSHIP PATTERNS

1966

MEMBER AND ASSOCIATE MEMBER INSTITUTIONS	Alaska	Idaho	Montana	Oregon	Washington	American Samoa	Guam	Hawaii	Totals
State Departments of Education	1	1	1	1	1				5
Schools and Districts	10	25	54	75	84				248
Private/Parochial Schools	-	-	6	1	4				11
Intermediate/County Schools	-	1	6	17	19				43
Colleges/Universities	1	4	6	25	26				62
Professional Associations	2	5	4	49	45				105
Cultural Agencies									
Business/Industry									
Others	-	-	2	12*	15				29
TOTALS	14	36	79	180	194				503

** 1 Bureau of Indian Affairs School.*

1970

MEMBER AND ASSOCIATE MEMBER INSTITUTIONS	Alaska	Idaho	Montana	Oregon	Washington	American Samoa	Guam	Hawaii	Totals
State Departments of Education	1	1	1	1	1				5
Schools and Districts	26	79	78	118	159				460
Private/Parochial Schools	8	2	5	7	8				30
Intermediate/County Schools	-	-	8	16	14				38
Colleges/Universities	6	5	7	29	26				73
Professional Associations	10	6	2	65	55				138
Cultural Agencies	1	-	2	6	4				13
Business/Industry	-	-	1	4	7				12
Others	3	5	3	34	14				59
TOTALS	55	98	107	279	288				828

1971

MEMBER AND ASSOCIATE MEMBER INSTITUTIONS	Alaska	Idaho	Montana	Oregon	Washington	American Samoa	Guam	Hawaii	Totals
State Departments of Education	1	1	1	1	1	1*	1*	1*	5
Schools and Districts	26	80	78	119	161				464
Private/Parochial Schools	8	2	5	7	8				30
Intermediate/County Schools	-	-	8	17	14				39
Colleges/Universities	6	5	7	29	26				73
Professional Associations	10	6	2	66	55				139
Cultural Agencies	1	-	2	6	5				14
Business/Industry	-	-	1	4	7				12
Others	4	5	3	34	14				60
TOTALS	56	99	107	283	291				836

* *Associate membership.*

1972

MEMBER AND ASSOCIATE MEMBER INSTITUTIONS	Alaska	Idaho	Montana	Oregon	Washington	American Samoa	Guam	Hawaii	Totals
State Departments of Education	1	1	1	1	1	1	1	1	8
Schools and Districts	27	80	78	115	158			7	465
Private/Parochial Schools	7	2	5	7	8			1	30
Intermediate/County Schools	-	-	8	17	14			-	39
Colleges/Universities	6	5	8	29	29			-	77
Professional Associations	8	6	2	61	55			-	132
Cultural Agencies	1	-	2	5	4			-	12
Business/Industry	-	-	1	4	7			-	12
Others	4	4	3	30	10			-	51
TOTALS	54	98	108	269	286	1	1	9	826

1973

MEMBER AND ASSOCIATE MEMBER INSTITUTIONS	Alaska	Idaho	Montana	Oregon	Washington	American Samoa	Guam	Hawaii	Totals
State Departments of Education	1	1	1	1	1	1	1	1	8
Schools and Districts	27	80	78	115	158		-	7	465
Private/Parochial Schools	7	3	5	7	8		-	1	31
Intermediate/County Schools	-	-	8	18	13		-	-	39
Colleges/Universities	6	5	9	28	30		1	-	79
Professional Associations	8	6	2	59	55		-	-	130
Cultural Agencies	1	-	2	5	4		-	-	12
Business/Industry	-	-	1	4	7		-	-	12
Others	3	4	3	30	10		-	-	50
TOTALS	53	99	109	267	286	1	2	9	826

1974

MEMBER AND ASSOCIATE MEMBER INSTITUTIONS	Alaska	Idaho	Montana	Oregon	Washington	American Samoa	Guam	Hawaii	Totals
State Departments of Education	1	1	1	1	1	1	1	1	8
Schools and Districts	27	81	79	115	157	-	-	7	466
Private/Parochial Schools	7	3	4	7	8	-	-	1	30
Intermediate/County Schools	-	-	8	18	12	-	-	-	38
Colleges/Universities	6	5	9	27	30	1	1	-	79
Professional Associations	7	6	2	59	55	-	-	-	129
Cultural Agencies	1	-	2	5	4	-	-	-	12
Business/Industry	-	-	1	4	7	-	-	-	12
Others	3	4	3	29	9	-	-	-	48
TOTALS	52	100	109	265	283	2	2	9	822

1975

MEMBER AND ASSOCIATE MEMBER INSTITUTIONS	Alaska	Idaho	Montana	Oregon	Washington	American Samoa	Guam	Hawaii	Totals
State Departments of Education	1	1	1	1	1	1	1	1	8
Schools and Districts	27	81	79	114	157	-	-	7	465
Private/Parochial Schools	7	3	4	7	8	-	-	1	30
Intermediate/County Schools	-	-	9	18	12	-	-	-	39
Colleges/Universities	6	5	9	27	30	1	1	-	79
Professional Associations	7	6	2	59	55	-	-	-	129
Cultural Agencies	1	-	2	5	4	-	-	-	12
Business/Industry	-	-	1	4	7	-	-	-	12
Others	3	4	3	29	8	-	-	-	47
TOTALS	52	100	110	264	282	2	2	9	821

1976

MEMBER AND ASSOCIATE MEMBER INSTITUTIONS	Alaska	Idaho	Montana	Oregon	Washington	American Samoa	Guam	Hawaii	Totals
State Departments of Education	1	1	1	1	1	1	1	1	8
Schools and Districts	27	81	79	113	157	-	-	7	464
Private/Parochial Schools	7	3	4	7	8	-	-	1	30
Intermediate/County Schools	-	-	9	18	12	-	-	-	39
Colleges/Universities	5	5	9	27	30	1	1	-	78
Professional Associations	6	6	2	58	55	-	-	-	127
Cultural Agencies	1	-	2	5	4	-	-	-	12
Business/Industry	-	-	1	4	7	-	-	-	12
Others	2	3	3	27	7	-	-	-	42
TOTALS	49	99	110	260	281	2	2	9	812

ALASKA

GROWTH PATTERN OF LABORATORY MEMBERSHIP	1966	1970	1971	1972	1973	1974	1975	1976
State Departments of Education	1	1	1	1	1	1	1	1
Schools and Districts	10	26	26	27	27	27	27	27
Private/Parochial Schools	-	8	8	7	7	7	7	7
Intermediate/County Schools	-	-	-	-	-	-	-	-
Colleges/Universities	1	6	6	6	6	6	6	5
Professional Associations	2	10	10	8	8	7	7	6
Cultural Agencies	-	-	-	-	-	-	-	-
Business/Industry	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-
TOTALS	14	51	51	49	49	48	48	46

IDAHO

GROWTH PATTERN OF LABORATORY MEMBERSHIP	1966	1970	1971	1972	1973	1974	1975	1976
State Departments of Education	1	1	1	1	1	1	1	1
Schools and Districts	25	79	80	80	80	81	81	81
Private/Parochial Schools	-	2	2	2	3	3	3	3
Intermediate/County Schools	1	-	-	-	-	-	-	-
Colleges/Universities	4	5	5	5	5	5	5	5
Professional Associations	5	6	6	6	6	6	6	6
Cultural Agencies	-	-	-	-	-	-	-	-
Business/Industry	-	-	-	-	-	-	-	-
Others	-	5	5	4	4	4	4	3
TOTALS	36	98	99	98	99	100	100	99

MONTANA

GROWTH PATTERN OF LABORATORY MEMBERSHIP	1966	1970	1971	1972	1973	1974	1975	1976
State Departments of Education	1	1	1	1	1	1	1	1
Schools and Districts	54	78	78	78	78	79	79	79
Private/Parochial Schools	6	5	5	5	5	4	4	4
Intermediate/County Schools	6	8	8	8	8	8	9	9
Colleges/Universities	6	7	7	8	9	9	9	9
Professional Associations	4	2	2	2	2	2	2	2
Cultural Agencies	-	2	2	2	2	2	2	2
Business/Industry	-	1	1	1	1	1	1	1
Others *	2	3	3	3	3	3	3	3
TOTALS	79	107	107	108	109	109	110	110

** 1966 figure includes Cultural Agencies and Business/Industry, if any.*

OREGON

GROWTH PATTERN OF LABORATORY MEMBERSHIP	1966	1970	1971	1972	1973	1974	1975	1976
State Departments of Education	1	1	1	1	1	1	1	1
Schools and Districts	75	118	119	115	115	115	114	113
Private/Parochial Schools	1	7	7	7	7	7	7	7
Intermediate/County Schools	17	16	17	17	18	18	18	18
Colleges/Universities	25	29	29	29	28	27	27	27
Professional Associations	49	65	66	61	59	59	59	58
Cultural Agencies	-	6	6	5	5	5	5	5
Business/Industry	-	4	4	4	4	4	4	4
Others **	12*	34	34	30	30	29	29	27
TOTALS	180	280	283	269	267	265	264	260

** 1 Bureau of Indian Affairs School.*

*** 1966 figure includes Cultural Agencies and Business/Industry, if any.*

WASHINGTON

GROWTH PATTERN OF LABORATORY MEMBERSHIP	1966	1970	1971	1972	1973	1974	1975	1976
State Departments of Education	1	1	1	1	1	1	1	1
Schools and Districts	84	159	161	158	158	157	157	157
Private/Parochial Schools	4	8	8	8	8	8	8	8
Intermediate/County Schools	19	14	14	14	13	12	12	12
Colleges/Universities	26	26	26	29	30	30	30	30
Professional Associations	45	55	55	55	55	55	55	55
Cultural Agencies	-	4	5	4	4	4	4	4
Business/Industry	-	7	7	7	7	7	7	7
Others *	29	14	14	10	10	9	8	7
TOTALS	208	288	291	286	286	283	282	281

** 1966 figure includes Cultural Agencies and Business/Industry, if any.*

BOARD MEMBER PROFILE

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NWREL BOARD MEMBER PROFILE: 1966-1976

	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Total Members	24	24	24	24	24	25	27	27	27	26	26
New Members This Year	15	3	3	1	10	8	4	3	12	3	6
Number From Each State											
Alaska	4	4	5	5	5	5	5	5	5	5	5
American Samoa							1	1	1		
Guam							1	1	1	1	1
Hawaii						1	1	1	1	1	1
Idaho	4	4	3	3	3	4	4	4	4	4	5
Montana	4	4	4	4	4	4	4	4	4	4	4
Oregon	5	6	5	5	4	6	5	5	7	6	5
Washington	7	6	7	7	8	5	6	6	4	5	5
Number From Each Category											
Academic Disciplines	2	3	3	3	3	2	1	1	1	1	1
Business, Industry, Labor	2	3	3	3	3	3	2	2	3	2	1
Classroom Teachers	3	2	2	2	2	2	2	2	1	1	1
Community Organizations	2	2	2	2	1	2	3	3	1	1	2
Elementary School Principals									1	1	1
Higher Education	3	2	2	2	3	3	3	3	2	3	3
Private/Parochial Schools	1	1	1	1	1	1	1	1	1	1	1
Professional Educational Assn.	1	1	1	1	1	1	1	1	1	1	1
Public School Administrators	5	4	5	5	5	5	6	6	8	8	8
State Education Agencies	5	5	5	5	5	6	8	8	8	7	7